Supply Base Report Template for Biomass Producers: Annex 1

Version 1.1
April 2020

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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Annex 1: Detailed Findings for Supply Base Evaluation Indicators

Shaw Resources Belledune

Biomass Producer Supply Base Evaluation

<table>
<tr><th></th><th>Indicator</th></tr>
<tr><td>1.1.1</td><td>The Biomass Producer’s Supply Base is defined and mapped.</td></tr>
<tr><td>Finding</td><td>The Biomass Producer’s (BP) supply base is New Brunswick (NB), Nova Scotia (NS), and South-eastern Quebec (QC). The supply base is mapped to ensure the scope is consistent with the risk assessment.

The following ecoregions have been identified by the World Wildlife Fund (WWF):
<table>
<tr><th>Ecoregion</th><th>Code</th><th>Province</th></tr>
<tr><td>Eastern Canadian Forest</td><td>NA0605</td><td>NB, NS, QC</td></tr>
<tr><td>New England-Acadian Forest</td><td>NA0410</td><td>NB, NS</td></tr>
<tr><td>Gulf of St. Lawrence Lowland</td><td>NA0605</td><td>NB, NS</td></tr>
</table>
Supplier contracts and assertions ensure that feedstock is legally sourced from within the defined supply base.</td></tr>
<tr><td>Means of Verification</td><td>Biomass producer’s (BP) Due Diligence System (DDS)
Supplier contracts and assertions
Primary and secondary feedstock source map

WWF Ecoregions:
https://www.worldwildlife.org/ecoregions/na0605
https://www.worldwildlife.org/ecoregions/na0410
https://www.worldwildlife.org/ecoregions/na0408</td></tr>
<tr><td>Evidence Reviewed</td><td>All means of verification reviewed</td></tr>
<tr><td>Risk Rating</td><td>☑ Low Risk ☐ Specified Risk ☐ Unspecified Risk at RA</td></tr>
<tr><td>Comment or Mitigation Measure</td><td>N/A</td></tr>
</table>

<table>
<tr><th></th><th>Indicator</th></tr>
<tr><td>1.1.2</td><td>Feedstock can be traced back to the defined Supply Base.</td></tr>
<tr><td>Finding</td><td>The Biomass Producer (BP) procures both primary feedstock (round wood and wood chips) and secondary feedstock (sawmill residuals - chips, shavings & sawdust). Biomass is transported from the forest or sawmill on trucks to the wood pellet plant. The BP receives both certified and uncertified fibre and round wood that originate from New Brunswick (NB), Nova Scotia (NS), and Quebec (QC).

Primary round wood in NB is accompanied by a Transportation Certificate (TC), which includes the Property Identification (PID). The PID is the feedstock’s identifier back to the forest management unit. PIDs are mapped by Service New Brunswick (https://paol.snb.ca). The Transportation of Primary Forest Products Act requires the accurate completion of TCs, which are subject to audits by the New Brunswick Department of Natural Resources (NBDNR) and New Brunswick Forest Products Commission.</td></tr>
</table>

	Some primary roundwood and wood chips are sourced from Sustainable Forest Management (SFM) certified lands, which are 3rd party audited. This provides further assurance and verification that feedstock can be traced back to the defined supply base. Secondary feedstock is purchased from local sawmills. NB sawmills typically procure round wood from Crown or private forests in New Brunswick. A small percentage of sawmill residuals originate from Quebec or Nova Scotia. Each load delivered to the pellet plant is accompanied by a scale ticket that identifies the supplier. Supplier declarations are completed quarterly and confirm tonnage of feedstock and certified content received from each supplier. Individual loads delivered and supplier declarations can be compared to scale reports for the same period. The due diligence system (DDS) employed through the BP's Environmental Management System requires that the BP have local knowledge of the supply base, provincial risk assessments, and supplier assertions. Regional risk assessments have been prepared for the entire supply base (NS, NB, and QC) and are reviewed on an annual basis. Supplier contracts include a clause requiring legal compliance and signed assertions declare that feedstock is legally sourced from within the BP's defined supply base of NB, NS or QC. On an annual basis, the BP completes supplier evaluations on 25% of secondary suppliers. The evaluation consists of a site visit to review and collect documentation on forest sources (location of the stump) to ensure that feedstock originates from within the defined supply base. The evaluations also identify how certified feedstock is traced back to the forest management unit. This control measure provides assurance to the BP that feedstock originates from within the defined supply base of the SBE. The BP has implemented a purchase wood risk assessment for all round wood purchases. Round wood purchases are evaluated annually; and depending on the associated risk, may be assessed based on forest practice compliance or site visits and field inspections facilitated by the BP. In addition, marketing boards conduct SFI Best Management Practice (SFI BMP) surveys and reports on a random selection of private wood lots on an annual basis. In summary, all feedstock can be traced back to the defined supply base. The BP verifies this on an annual basis through the BP's internal and external audits.
Means of Verification	Supplier contracts and assertions PEFC DDS (BP's EMS Manual) NB, NS, and QC risk assessments BP's annual supplier evaluations BP's internal audit BP's purchase wood risk assessment Staff interviews Scale tickets, bills of lading, transportation certificates Sales documents PEFC & SBP 3rd party audit reports
Evidence Reviewed	All means of verification reviewed
Risk Rating	☑ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	N/A

	Indicator
1.1.3	The feedstock input profile is described and categorised by the mix of inputs.
Finding	Species and type of feedstock (round wood, sawdust, shavings, chips, etc.) are documented on incoming documentation (i.e. scale ticket, bill of lading, or transportation certificate). Feedstock is also categorized on each supplier's quarterly declaration, which is recorded in the BP's credit account. The credit account tracks certified feedstock using a percentage based system (inputs and outputs) that is certified to the PEFC Chain of Custody standard (PEFC ST 2002:2013). The BP's PEFC certification is 3rd party audited on an annual basis. Sales documents and payment information provide confirmation of purchases from individual suppliers. PEFC Certificate No. SCS-PEFC/COC-007166
Means of Verification	Scale tickets, bills of lading, Transportation Certificates Quarterly supplier declarations Sales documents BP's credit account PEFC COC Standard (PEFC ST 2002:2013) PEFC certificate database: https://www.pefc.org/find-certified/certified-certificates
Evidence Reviewed	All means of verification reviewed
Risk Rating	☑ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	N/A

	Indicator
1.2.1	The Biomass Producer has implemented appropriate control systems and procedures to ensure that legality of ownership and land use can be demonstrated for the Supply Base.
Finding	Incoming documents accompany each load of primary and secondary feedstock. Depending on the source, these documents contain the information to assist in tracking the feedstock, including woodlot owner, sawmill, cut block, contractor, type of feedstock and species. Transportation certificates (TC) are delivered with each load of primary feedstock. They include the Property Identification (PID) for private land and Forest Management Unit (FMU) for Crown land. The PID ensures legality of ownership and land use. If a load arrives at the facility without proper information, the load is rejected. Each province has land use laws to ensure accessibility to guaranteed property titles and for legality of land ownership. Land use is regulated by municipal by-laws. Private land titles are registered with provincial registry offices where annual assessments determine the annual tax rate. Forest tenure contracts are used for public or Crown land. In New Brunswick (NB), forests are governed through the *Crown Lands and Forests Act*. Most Crown and industry freehold lands are forest management (FM) certified and undergo annual 3rd party audits; audit reports are publicly available. Private woodlots also undergo annual BMP audits through regional marketing boards. The PID or FMU can trace

	feedstock back to the forest unit. The NB *Transportation of Primary Forest Products Act* requires the accurate completion of a TC, which is subject to audits by NB Department of Natural Resources and NB Forest Products Commission. The *Community Planning Act* establishes the legislation for regional development and community planning, land use and zoning, and land acquisition. In Nova Scotia (NS), private woodlots are the primary source of forest products for industry and are governed by the *Forests Act*. The Nova Scotia Department of Natural Resources (NSDNR) provides authority to harvest from provincial Crown land under the *Crown Lands Act,* and requires a letter of authority, permit, licence and forest utilization agreement. The letter of authority details allowable products and maximum allowable cut. NSDNR's enforcement division manages all allocations assigned on Crown land. Businesses and individuals that surpass a specified minimum purchase volume of primary feedstock must register through the NS Registry of Buyers. The *Forest Sustainability Regulations* require registered buyers to make payments into a silviculture fund for private woodlots in proportion to the value of primary forest products acquired. *Nova Scotia's Land Registration Act* ensures that both Crown and private land owners are able to obtain a guaranteed title to a property. The *Municipal Government Act* authorizes a municipality to develop and adopt a municipal planning strategy and land use by-law. In Quebec (QC), ~90% of all productive forest areas are certified to SFM standards (SFI, FSC or CSA). Crown and private forests are governed through the *Sustainable Forest Development Act* administered by the Minister of Natural Resources (MRN). The MRN is responsible for preparing forest management plans for all Crown forests, and offering technical and financial support for sustainable forestry to private woodlots. The MRN authorizes all permits, agreements and contracts associated with wood harvesting; and inspects and audits harvested lands. Similar to NB, primary feedstock in QC must be accompanied with a Transportation Certificate indicating its origin. *The Act Respecting Land Use Planning and Development* establishes the legal framework for land use planning and development in the province. The *FSC National Risk Assessment* (2020) assigns a low risk rating for land tenure and management rights in Canada (Indicator 1.1). It states: "Canada has established an extensive and rigorous system of forest governance to prevent abuses with regards to land tenure and ownership. In 2014, the World Resources Institute referred to Canada's record of the lowest prevalence of suspicious log supply and corruption of any country. A low level of corruption coupled with strong tenure governance systems throughout the country means a low risk of illegally obtained forest licenses or tax exemptions." The BP's PEFC Due Diligence System (DDS) helps to ensure that the risk of receiving material from controversial sources is minimized. This includes local knowledge of the supply base by procurement staff, and the completion of risk assessments and supplier assertions. Regional risk assessments have been prepared for the entire supply base (NS, NB, and QC) and are reviewed on an annual basis. The DDS is audited as part of the BP's annual 3rd party PEFC COC certification. Supplier contracts and assertions include a clause requiring legal compliance. Below is an excerpt from the supplier assertion: *The supplier confirms that round wood and wood fibre don't originate from unacceptable or controversial sources, which include sources that are:* *1. Not complying with local, national or international legislation* *2. Not complying with legislation of the country of harvest relating to trade and customs, in so far as the forest sector is concerned,* *The round wood and biomass originates from:* *1. Nova Scotia, New Brunswick, or Quebec;* *2. Areas not covered by the UN Security Council ban on Timber; and* *Areas governed by a legislated stumpage system that requires documentation to*

	confirm the supply of the fibre to the forest management unit (i.e. license or tenure). On an annual basis, the BP evaluates 25% of secondary feedstock suppliers. The evaluation consists of a site visit to review and collect documentation on forest sources (location of the stump) to ensure that feedstock originates from within the supply base and to identify how certified feedstock is traced back to the forest management unit. This control measure provides further assurance to the BP that feedstock originates from within the defined supply base The BP has implemented a purchase wood risk assessment for all round wood purchases. Roundwood purchases are evaluated annually, depending on the associated risk, may be assessed based on forest practice compliance or have site visits and field inspections facilitated by the BP. In addition, the marketing boards conduct SFI BMP surveys and reports on a random selection of private woodlots on an annual basis.
Means of Verification	Supplier contracts & assertions Annual supplier evaluations Purchase wood risk assessment PEFC wood procurement protocol (EMS manual) PEFC due diligence system (EMS manual) NB, NS, QC risk assessment SFI BMP survey & reports Scale tickets, bill of ladings, Transportation Certificates Provincial legislation on land use & ownership FSC National Risk Assessment: https://ca.fsc.org/en-ca/standards/national-risk-assessment-01
Evidence Reviewed	All means of verification reviewed
Risk Rating	☑ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	N/A

	Indicator
1.3.1	The BP has implemented appropriate control systems and procedures to ensure that feedstock is legally harvested and supplied and is in compliance with EUTR legality requirements.
Finding	The BP's PEFC Due Diligence System (DDS) is aligned with the *European Union Timber Regulation* (EUTR). The DDS minimizes the risk of receiving supplies from illegal timber harvesting. Risk assessments are maintained for each province in the defined supply base and are updated on an annual basis. The following sources provide assurance that the source areas are low risk for illegal logging/activities or corruption: 1. https://www.illegal-logging.info/ 2. http://www.un.org/en/documents/index.html 3. http://www.transparency.org 4. http://info.worldbank.org/governance/wgi/index.aspx#home 5. http://www.eia-international.org Transparency international has become one of the leading evaluators of public sector corruption. Year over year, Canada is rated as having a very low incidence of corruption. The *2019 Corruption Perceptions Index* ranks Canada 12^{h} in the world relative to 180 countries

with a score of 77.

Worldwide Governance Indicators (WGI) rank countries based on a multitude of indicators in relation to that country's governance. In 2018, Canada ranked:

- 84.76% for political stability and absence of violence
- 94.71% for government effectiveness
- 96.06% for voice and accountability
- 93.75% for regulatory quality
- 94.71% for rule of law
- 94.71% for control of corruption

Figure 1.3 1-1 illustrates the WGI ranking for Canada for the years 2008, 2013, and 2018.

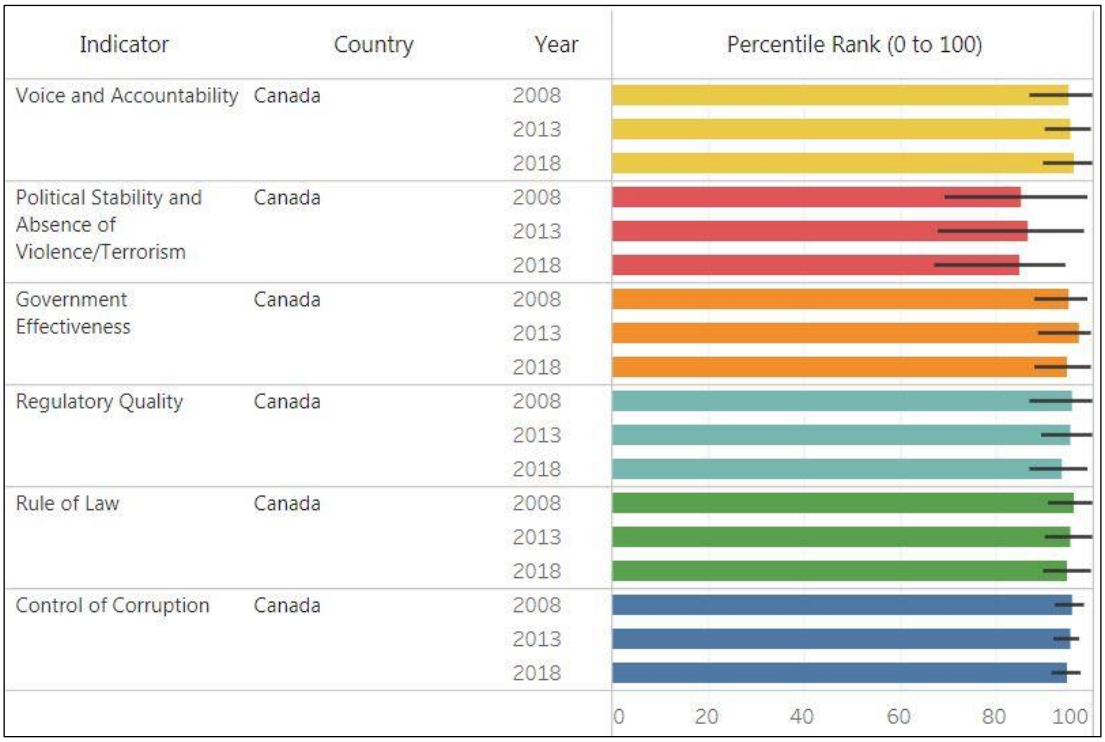


Figure 1.3 1-1: Canada's WGI for 2008, 2013, 2018 (Kaufmann, D., A. Kraay, and M. Mastruzzi (2010), The Worldwide Governance Indicators: Methodology and Analytical Use)

The UN Security Council has not issued a ban on timber exports from NB, NS or QC, and Canada is not designated as a source of conflict timber. The *FSC National Risk Assessment for Canada (2020)* concludes that Canada has a low risk for illegal logging and illegally obtained forest licenses or tax exemptions.

Supplier contracts and assertions include a clause requiring legal compliance. Below is an excerpt from the supplier assertion:

The supplier confirms that round wood and wood fibre don't originate from unacceptable or controversial sources, which include sources that are:
1. Not complying with local, national or international legislation
2. Not complying with legislation of the country of harvest relating to trade and customs, in so far as the forest sector is concerned,

The round wood and biomass originates from:
1. Nova Scotia, New Brunswick, or Quebec;
2. Areas not covered by the UN Security Council ban on Timber; and
Areas governed by a legislated stumpage system that requires documentation to confirm the supply of the fibre to the forest management unit (i.e. license or tenure).

Means of Verification	Supplier contracts and assertions NB, NS, QC risk assessments BPs PEFC due diligence system Provincial legislation on land use & ownership World Bank website: http://info.worldbank.org/governance/wgi/index.aspx#home Transparency International: http://www.transparency.org/ Environmental Investigation Agency: http://www.eia-international.org Canadian Council of Forest Ministers national status report: www.ccfm.org/pdf/C&I_e.pdf FSC national risk assessment: https://ca.fsc.org/en-ca/standards/national-risk-assessment-01 The Royal Institute of International Affairs: https://www.illegal-logging.info/ UN Security Council: http://www.un.org/en/documents/index.html European Commission, Environment: http://ec.europa.eu/environment/forests/timber_regulation.htm
Evidence Reviewed	All means of verification reviewed
Risk Rating	☑ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	N/A

	Indicator
1.4.1	The Biomass Producer has implemented appropriate control systems and procedures to verify that payments for harvest rights and timber, including duties, relevant royalties and taxes related to timber harvesting, are complete and up to date.
Finding	The *FSC National Risk Assessment for Canada* (2020) identifies a low risk for non-payment of harvesting (stumpage) fees. Harvests on Canadian Crown lands have an associated harvesting (stumpage) fee that is paid to the Crown. Forestry companies operating in public forests must formally report on their operations. Provincial governments are responsible for setting stumpage fees, collecting royalty payments, completing forest audits, and in some cases, investigating any infractions to the regulations. Penalties may include fines, suspension of harvesting rights, seizure of timber or imprisonment. In New Brunswick (NB), Crown land licensees are responsible for the proper scaling and remitting of all royalties. The royalty payments are published in the *New Brunswick Department of Natural Resources Annual Report*. NB marketing boards conduct annual audits on select private woodlots each year to ensure legality of harvesting. Furthermore, transportation certificates with property identification (PID) are inspected and enforced through the NB *Transportation of Primary Forest Products Act.* In provinces like Nova Scotia (NS), where harvesting on private lands for commercial purposes is more common, the provincial government have created legislation to regulate harvesting. Registered buyers of primary wood products must submit statistical returns with the volume of wood purchased. Export documents must be kept on hand and

	provided to the Minister upon request. The *NS Scalers Act* applies to both public and private lands. The Act mandates that anyone scaling more than 1000 cubic metres of primary wood products per year is required to possess an active scaling licence. Buyers who obtain more than 5,000 cubic meters/year of privately sourced wood must have a Wood Acquisition Plan. The plan must detail how the buyer will meet their obligation under the *Forest Sustainability Regulations*. The buyer can opt to pay directly to a sustainable forestry fund or carry out silviculture activities on privately owned land. Private landowners rely on commercial or civic laws to protect their property from timber theft or to enforce the terms of a business transaction. Royalties are paid for all timber harvested from NS Crown lands. The NS Department of Natural Resources regional field staff and conservation officers monitor and enforce activities on Crown lands to prevent unauthorized harvest or theft of timber. In **Quebec (QC)**, under the *Forests Act,* the Minister is responsible of Crown forest resource management. Timber Supply and Forest Management Agreements allows a harvester to remove a predetermined volume and species of timber, so long as the agreement holder has prepared a forest management plan that complies with forest management standards. This agreement provides the legal basis for ensuring the payment of annual dues, which can either be paid directly or through silviculture treatments. For QC private woodlots, the newly formed timber marketing boards set the rate for annual dues and cost of timber. In the southern regions of the province, where feedstock is sourced, private forests are a showcase for forestry practices because they are located in populated areas, and are typically held to a higher standard of accountability. Supplier contracts have a clause requiring compliance to all Acts and regulations. Furthermore, suppliers have signed an assertion which specifies the requirement to legally source fibre from within the defined supply base of this evaluation. On an annual basis, the BP completes supplier evaluations on 25% of secondary suppliers. The internal supplier audit consists of a site visit to review and collect documentation on forest sources (location of the stump) to ensure that feedstock originates from within the supply base, and to identify how certified feedstock is traced back to the forest management unit. This control measure provides assurance that feedstock originates from within the defined supply base. The BP has implemented a purchase wood risk assessment for all round wood purchases. Round wood purchases are evaluated annually; and depending on the associated risk, may be assessed based on forest practice compliance or have site visits and field inspections facilitated by the BP. In addition, the marketing boards conduct SFI BMP surveys and reports on a random selection of private wood lots on an annual basis. Risk assessments have been completed for each of the 3 provinces as part of the BP's PEFC due diligence system.
Means of Verification	Supplier contracts and assertions Purchase wood risk assessments BP's annual supplier evaluations NB, NS, QC risk assessments NB Department of Natural Resources annual forestry report: https://www2.gnb.ca/content/gnb/en/departments/erd/Publications.html NB Transportation of Primary Forest Products Act: https://www.canlii.org/en/nb/laws/stat/snb-1999-c-t-11.02/latest/snb-1999-c-t-11.02.html NS Registry of Buyers annual report: https://novascotia.ca/natr/forestry/registry/ann_report.asp NS Forest Sustainability Regulations: https://www.novascotia.ca/just/regulations/regs/fosust.htm QC Forests Act: http://legisquebec.gouv.qc.ca/en/ShowDoc/cs/F-4.1

	FSC National Risk Assessment: https://ca.fsc.org/en-ca/standards/national-risk-assessment-01
Evidence Reviewed	All means of verification reviewed
Risk Rating	☑ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	N/A

	Indicator
1.5.1	The Biomass Producer has implemented appropriate control systems and procedures to verify that feedstock is supplied in compliance with the requirements of CITES.
Finding	The species and origin of incoming feedstock are documented and there are no endangered or threatened species used. There are no Canadian tree species on the CITES list of species. As a party to CITES, Canada has an international obligation to regulate the trade in CITES-listed wild animals and plants. The *Wild Animal and Plant Protection* and *Regulation of International and Interprovincial Trade Act* (WAPPRIITA) was enacted to control CITES-listed species in Canada. The act is also used to control imports of other non CITES-listed species that have been obtained illegally. The *FSC National Risk Assessment for Canada* (2020) states that the governance system as a whole, combined with the resources and rigour of the Canadian customs agencies result in low risk of illegal practices with regards to customs regulations. Supplier contracts have requirements for adherence to regulations and assertions state that feedstock is not sourced from areas that doesn't comply with the requirements of CITES. On an annual basis, the BP completes supplier evaluations on 25% of secondary suppliers. The internal supplier audit consists of a site visit to review and collect documentation on forest sources (location of the stump) to ensure that feedstock originates from within the supply base, and to identify how certified feedstock is traced back to the forest management unit. The BP has implemented a purchase wood risk assessment for all round wood purchases. Round wood purchases are evaluated annually; and depending on the associated risk, may be assessed based on forest practice compliance or have site visits and field inspections facilitated by the BP. In addition, the marketing boards conduct SFI BMP surveys and reports on a random selection of private wood lots on an annual basis. Risk assessments have been completed for each of the 3 provinces as part of the BP's PEFC due diligence system.
Means of Verification	Supplier contracts and assertions BP's annual supplier evaluations BP's purchase wood risk assessment NB, NS, QC risk assessments Index of CITES species List of applicable laws and regulations Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act:

	https://laws-lois.justice.gc.ca/eng/acts/w-8.5/index.html Government of Canada on CITES: https://www.canada.ca/en/environment-climate-change/services/convention-international-trade-endangered-species.html Species +: https://speciesplus.net/species FSC National Risk Assessment: https://ca.fsc.org/en-ca/standards/national-risk-assessment-01
Evidence Reviewed	All means of verification reviewed
Risk Rating	☑ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	N/A

	Indicator
1.6.1	The Biomass Producer has implemented appropriate control systems and procedures to ensure that feedstock is not sourced from areas where there are violations of traditional or civil rights.
Finding	The *Canadian Charter of Rights and Freedoms* forms the first part of the Constitution Act (1982). The Charter falls into seven distinct categories: fundamental freedoms, democratic rights, language rights, mobility rights, minority language education rights, legal rights and equality rights. The Charter also recognizes Indigenous rights and treaty rights (Section 35). According to the ILO website, Canada has ratified all 8 of the Fundamental Conventions (Figure 1.6.1-1); therefore, a low risk is concluded for violation of ILO fundamental principles and rights.

Fundamental

Convention	Date	Status
C029 - Forced Labour Convention, 1930 (No. 29) ***P029*** *- Protocol of 2014 to the Forced Labour Convention, 1930 ratified on 17 Jun 2019 (In Force)*	13 Jun 2011	In Force
C087 - Freedom of Association and Protection of the Right to Organise Convention, 1948 (No. 87)	23 Mar 1972	In Force
C098 - Right to Organise and Collective Bargaining Convention, 1949 (No. 98)	14 Jun 2017	In Force
C100 - Equal Remuneration Convention, 1951 (No. 100)	16 Nov 1972	In Force
C105 - Abolition of Forced Labour Convention, 1957 (No. 105)	14 Jul 1959	In Force
C111 - Discrimination (Employment and Occupation) Convention, 1958 (No. 111)	26 Nov 1964	In Force
C138 - Minimum Age Convention, 1973 (No. 138) *Minimum age specified: 16 years*	08 Jun 2016	In Force
C182 - Worst Forms of Child Labour Convention, 1999 (No. 182)	06 Jun 2000	In Force

Figure 1.6.1-1: Canada's 8 ratified fundamental conventions (https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:11200:0::NO::P11200_COUNTRY_ID:102582)

Due to the scale of the assessment, the *FSC National Risk Assessment for Canada* (2020) took the precautionary approach and identified a specified risk designation for Canada in regards to the rights of Indigenous and Traditional Peoples being upheld. At the time of the assessment, data were unavailable or insufficient to determine the extent to which violations to indigenous rights as a result of forest management activities were occurring. It was noted in the FSC NRA that an assessment of infringement at the community level is best completed by the primary producer (organizations receiving wood and materials directly from the forest of origin).

The FSC NRA also provides primary producers with a combination of control measures:

1. Indigenous Peoples with legal and/or customary rights within the Forest Management Unit do not oppose the Forest Management Plan
2. An agreement exists between Indigenous Peoples and the resource manager/supplier that follows the principles of Free, Prior and Informed Consent (FPIC)
3. An Indigenous-led or co-developed land use plan is in place within the supply area.
4. Best efforts to engage with Indigenous Peoples with legal and customary rights within the Forest Management Unit to understand if/how these rights are violated as a result of forest management activities, is demonstrated.

For non-primary producers the NRA provides the following control measure:

1. A dispute resolution process is established specifically to address issues arising from violations of the right of Indigenous People related to forest management actives. The dispute resolution process is implemented in the event a dispute of substantial magnitude arises with the supply area.

Primary forest products originate from 3 types of sources:

1) Private woodlots in NB and QC

   All round wood originating from private woodlots must be received through regional marketing boards. Transportation Certificates confirming the property identification (PID) must accompany each load. The PID assists in confirming deeded land ownership. Furthermore, there is no evidence that Indigenous People are opposing Forest Management Plans on private woodlots, so the FSC NRA (2020) Control Measure 1 applies to private woodlots in NB and PQ, and these forested areas are considered low risk.

2) 3rd party FM certified industry freehold in New Brunswick

   Primary forest products that the biomass producer receives from industry freehold land are accompanied with a 100% forest management certified claim. The industry freehold organization undergoes annual 3rd party audits. These audits confirm land ownership and rights to the areas where these primary forest products are sourced. There is no evidence that Indigenous People are opposing Forest Management Plans on industry freehold lands, so the FSC NRA (2020) Control Measure 1 applies here as well, so primary forest products from NB industry freehold are given a low risk designation.

3) 3rd party FM certified Crown lands in New Brunswick

   Crown land forest management plans are reviewed and approved by New Brunswick Department of Natural Resources and most Crown lands in NB are 3rd party forest management certified.

   The Department of Natural Resources and Energy Development has allocated 5% of the Annual Allowable Cut on provincial Crown lands to First Nations communities since 1998 in an effort to generate employment and economic development opportunities. Commercial Harvesting Agreements between NRED and all fifteen First Nations communities in New Brunswick specify the volumes of softwood and hardwood allocated to each; and royalties from these volumes of Crown timber are directed to each community by NRED.

   There is evidence that Indigenous People are opposing Forest Management Planning in Crown forests in New Brunswick. The provincial government recognizes the importance of First Nations exercising their rights to hunt, fish and gather, and

	are actively implementing consultation strategies to ensure that the diverse values of First Nations are upheld in NB. Through early engagement and formal consultation processes, the government can protect Aboriginal and treaty rights and improve cultural awareness. In light of this, it is noted that currently, the provincial government are demonstrating their best efforts to engage with Indigenous Peoples and their legal and customary rights within the Forest Management Unit to understand if/how rights are violated as a result of forest management activities. Some secondary fibre originates from Nova Scotian and Quebec forests. Secondary fibre from Quebec is 100% FSC certified, and there is no evidence that Indigenous Peoples are opposing Forest Management plans in Nova Scotia, so Control Measure 1 of the FSC NRA is applicable and a low risk rating is given. On an annual basis, the BP completes supplier evaluations on 25% of secondary suppliers. The internal supplier audit consists of a site visit to review and collect documentation on forest sources (location of the stump) to ensure that feedstock originates from within the supply base, and to identify how certified feedstock is traced back to the forest management unit. The BP has implemented a purchase wood risk assessment for all round wood purchases. Round wood purchases are evaluated annually; and depending on the associated risk, may be assessed based on forest practice compliance or have site visits and field inspections facilitated by the BP. Purchase Wood Inspection Forms include the verification whether there is evidence of violation of traditional or civil rights. In addition, marketing boards conduct SFI BMP surveys and reports on a random selection of private wood lots on an annual basis. Supplier contracts and assertions require adherence to applicable legislation. The BP has implemented a Due Diligence System (DDS) through their PEFC Chain of Custody certification. Risk assessments for each province have been completed and are updated annually.
Means of Verification	Supplier contracts and assertions NB, NS, QC Risk Assessments BP's PEFC Due Diligence System NB First Nations Forestry Agreements: https://www2.gnb.ca/content/gnb/en/departments/erd/natural_resources/content/ForestsCrownLands/content/FirstNationsForestAgreements.html Canadian Charter of Rights and Freedoms: https://laws-lois.justice.gc.ca/eng/Const/page-15.html ILO Helpdesk: https://www.ilo.org/empent/areas/business-helpdesk/lang--en/index.htm FSC National Risk Assessment: https://ca.fsc.org/en-ca/standards/national-risk-assessment-01 U.S. Department of State on Canada Human Rights: http://www.state.gov/g/drl/rls/hrrpt/2005/61719.htm Natural Resources Canada Indigenous Forestry Initiative: http://www.nrcan.gc.ca/forests/federal-programs/13125
Evidence Reviewed	All means of verification reviewed
Risk Rating	☑ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	N/A

	Indicator
2.1.1	The Biomass Producer has implemented appropriate control systems and procedures for verifying that forests and other areas with high conservation values are identified and mapped.
Finding	**About 70-80%** of the BP's feedstock is sustainable forest management (SFM) certified and acquired through the PEFC chain of custody (COC) system. SFM certificate holders are required to maintain forest management and harvest plans consistent with best management practices, particularly with regard to high conservation values (HCV). Certified feedstock is either SFI or FSC FM certified. Both standards include measures for the protection and enhancement of high conservation values in the management unit. SFM certificate holders undergo annual 3rd party audits, which provide further assurance that critical habitat and HCV forests are identified, mapped, and conserved. Forest audit reports and public summary are available online and may be reviewed for non-compliances to the standards. **The remaining ~20-30%** is uncertified feedstock from managed forests. The majority of uncertified feedstock is primarily from private forest lands in New Brunswick. Regional marketing boards represent private woodlot owners in the province. Marketing boards distribute BMP guides to private woodlot owners or contractors "*Best Management Practices: A Practical Guide to BMP's in New Brunswick's Private Woodlots*". The guide is supported by the SFI Implementation Committee in New Brunswick and lays out similar objectives to the SFI FM standard, including objectives for forests with exceptional conservation value. The marketing boards assist the private woodlot owners or contractors with forest management plans and mapping when needed. Three WWF ecoregions have been identified and mapped for the supply base, the Eastern Canadian Forest, the New England Acadian Forest, and the Gulf of St. Lawrence Lowland Forest. The *FSC National Risk Assessment for Canada* [FSC NRA] (2020) has been utilized to further assess the risk for HCV in the supply base. There are 6 HCV features identified in the FSC NRA: • HCV 1: Species Diversity • HCV 2: Landscape-level ecosystems and mosaics • HCV 3: Ecosystems and Habitat • HCV 4: Critical Ecosystem Services • HCV 5: Community Needs • HCV 6: Cultural values HCV 1, species diversity, is evaluated based on species identified by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) – a panel of expert Canadian scientists, as a basis for the determination of risk. COSEWIC makes recommendations to the Minister of Environment, and the minister will create listing plans and evaluate whether the species is added to the *Species at Risk Act* (SARA). Recovery plans are created for species added to SARA. In the FSC NRA (2020), HCV 1 (Species Diversity) was identified as having specified risk for two of the three ecoregions in the supply base. The Eastern Canadian Forests and the New England Acadian Forests have specified risk, whereas the Gulf of St. Lawrence Lowland Forests have low risk. The assessment identifies areas with specified risk for HCV 2 (Landscape Level Ecosystems and Mosaics) by identifying forest landscapes that have specified risk on a map (See figure 2.1.1-1). Currently, the biomass producer does not procure fibre from any areas within the red specified risk regions identified on the map.

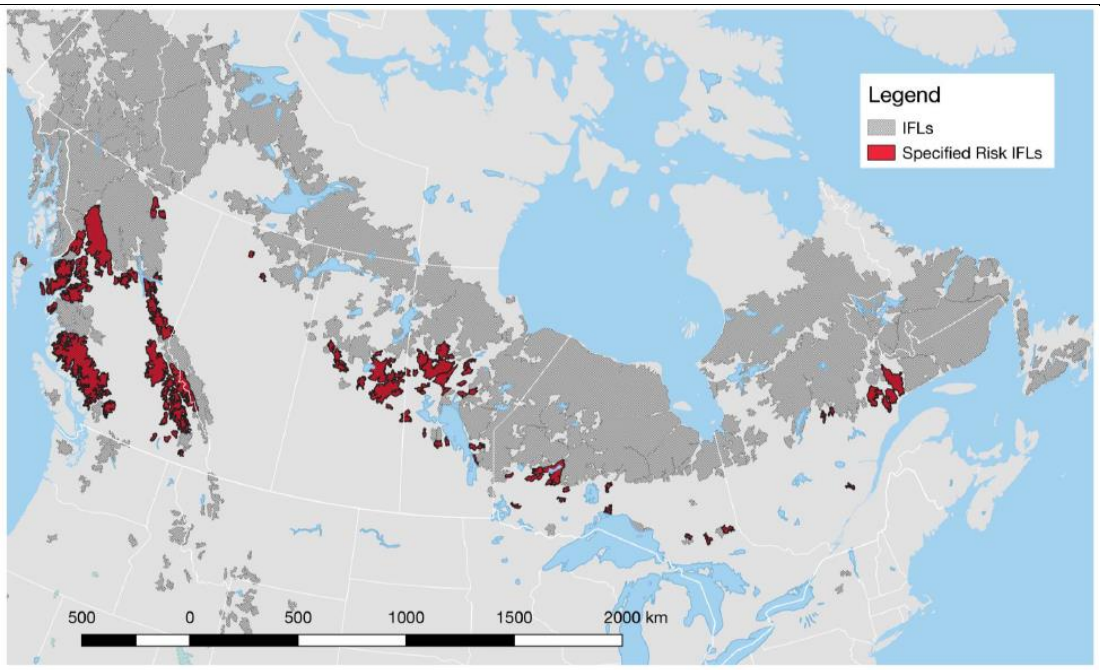
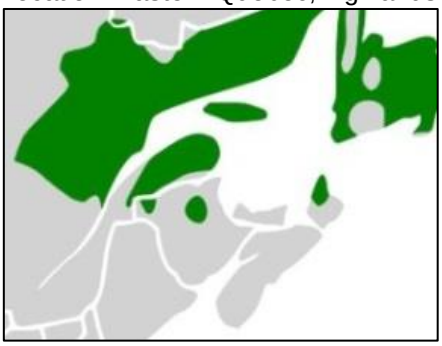


Figure 2.1.1-1 Map of Specified Risk IFLs from National Risk Assessment for Canada: HCV2 (FSC-NRA-CA V2-1, National Risk Assessment for Canada, 2020)

Eastern Canadian Forest

Location: Eastern Quebec, highlands of New Brunswick and Cape Breton, Newfoundland



Of the 33 forested ecoregions in Canada, the *WWF Conservation Status Index* lists the Eastern Canadian Forest as critical/endangered and is shown in the map above.

The FSC NRA (2020) identifies this ecoregion at a low risk for the following HCV indicators for this ecoregion:

- HCV 3: Ecosystems and Habitat
- HCV 4: Critical Ecosystem Services
- HCV 5: Community Needs
- HCV 6 Cultural values

The assessment identifies the Eastern Canadian Forest as a specified risk for HCV 1. The risk assessment had two approaches for identifying HCV 1 forests, and included concentrations of SAR critical habitat and critical habitat for SAR of special significance. The Species Richness Ratio for the Eastern Canadian Forest is 4.57. For HCV 1, areas within each forested ecoregion where critical habitat was identified in recovery strategies (under the federal Species at Risk Act) were used in determining areas of specified risk. In the Eastern Canadian Forest, the American Marten's Newfoundland population was designated as specified risk. Since the biomass producer does not procure fibre in the regions where this population exists, it has been given a low risk rating.

The BP identifies the Eastern Canadian Forest at a low risk for identifying and mapping high conservation values forests because:

- Most of this ecoregion is outside of the defined supply base (Northern Quebec and

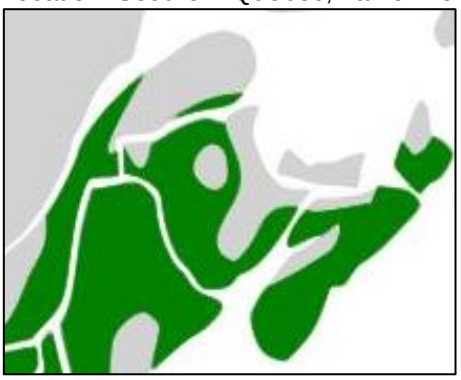
Newfoundland). Eastern Canadian Forests within the defined supply base are in NB and Cape Breton Highlands, NS, which are outside of the procurement area for primary and secondary fibre suppliers.

- Most Eastern Canadian Forest regions in the supply base are designated as protected areas (In Gaspe, QC & Cape Breton Highlands, NS) or are located on NB Crown lands. HCV sites are avoided during harvests under current management practice recommendations included in BMP manuals and guidelines. Most Crown land is SFM certified, so forest management plans are 3rd party audited to recognized forest management standards.

- The WWF has mapped and identified areas of high conservation value, and the FSC NRA (2020) has evaluated risks associated with these and have identified areas with specified risk. The FSC NRA (2020) identified a specified risk for HCV 1 for the Newfoundland population of the American Marten. This population is not located within the defined supply base. The FSC NRA (2020) also identified specified risk for some Intact Forest Landscapes (HCV 2) in this region; however, they are also outside of the defined supply base as can be seen on Figure 2.1.1-1.

New England Acadian Forest

Location: Southern Quebec, half of New Brunswick and most of Nova Scotia



The WWF Conservation Status Index lists the New England Acadian Forest as critical/endangered and a map is shown above. The FSC NRA (2020) identifies this ecoregion at a low risk for the following HCV indicators:

- HCV 2: Landscape-level ecosystems and mosaics
- HCV 3. Ecosystems and habitats
- HCV 4: Critical ecosystem services
- HCV 5: Community needs
- HCV 6: Cultural values

The assessment identifies New England Acadian Forests as having specified risk for HCV 1 (Species Diversity). Critical Habitat for Rainbow Smelt (Lake Utopia small-bodied population), Furbish's Lousewort, Blanding's Turtle, and Van Brunt's Jacob's-ladder are located within some regions of the New England Acadian Forest.

The BP identifies the New England Acadian Forest at a low risk for identifying and mapping high conservation values forests because:

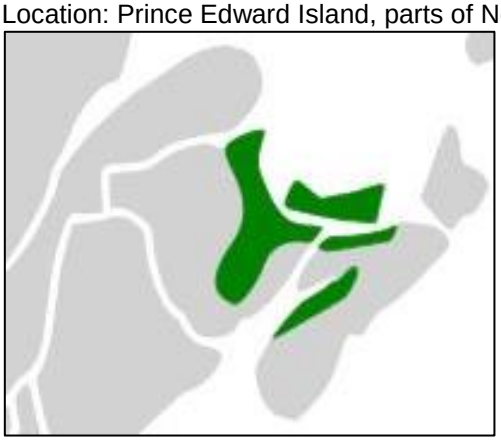
- The WWF has mapped and identified areas of high conservation value, and the FSC NRA (2020) has evaluated risks associated with High Conservation Values in the New England Acadian Forest ecoregion. The assessment identified areas with specified risk within the defined supply base with regards to critical habitat, which will be discussed further in section 2.2.4 on biodiversity.

- Best management practices are implemented in the areas where these forests are harvested. Forest Management Plans identify and map areas of High Conservation Value. Furthermore, areas designated as HCV are often protected provincially or

federally as parks or protected areas.

Gulf of St. Lawrence Lowland Forest

Location: Prince Edward Island, parts of New Brunswick and western coast of Nova Scotia



The WWF Conservation Status Index lists the Gulf of St. Lawrence Lowland Forest as critical/endangered and it is mapped as shown above.

The FSC NRA (2020) identifies this ecoregion at a low risk for the following HCV indicators:

- HCV 1: SAR Critical Habitat
- HCV 2: Landscape-level ecosystems and mosaics
- HCV 3. Ecosystems and habitats
- HCV 4: Critical ecosystem services
- HCV 5: Community needs
- HCV 6: Cultural values

The BP identifies the Gulf of St. Lawrence Lowland Forest at a low risk for identifying and mapping high conservation values forests because:

- The WWF has mapped and identified areas of high conservation value, and the FSC NRA (2020) has given a low risk rating for all of the HCV indicators
- Best management practices are implemented in the areas where these forests are harvested and areas of High Conservation Value are identified in forest management plans.

In addition to above, Protected Natural Areas (PNA) in New Brunswick are mapped, and sites of high or unique ecological, historical, cultural or scenic value are preserved.

In Nova Scotia, high conservation value forests on Crown lands are protected through legislation, and enforced by Department of Natural Resources – these areas are also mapped. On private lands, designation and protection require agreement with the landowner.

In Quebec, 92% of forests are considered Crown lands, and as of 2013, 90% of productive public forests are certified through recognized SFM standards (PEFC, FSC, SFI). 3rd party certification requires that areas of high conservation value are identified and mapped. Furthermore, the Minister of Environment may designate a forest as an exceptional forest ecosystem at any time, and all forest development activities would be prohibited in these areas.

Contracts with fibre and round wood supplier require adherence to regional, provincial and federal legislation. Prior to bringing any feedstock onto the site, all suppliers are required to sign a supplier's assertion that states the following:

> *The supplier confirms that round wood and wood fibre don't originate from unacceptable or controversial sources, which include sources that are:*

	1. *Not complying with local, national or international legislation, in particular:* ▪ *forestry operations and harvesting, including biodiversity conservation and conversion of forest to other use* ▪ *management of areas with designated high environmental and cultural values, protected and endangered species, including requirements of CITES,* ▪ *health and labour issues relating to forest workers, indigenous peoples' property, tenure and use rights, third parties' property, tenure and use rights,* ▪ *payment of taxes and royalties related to timber harvesting are complete and up to date,* 2. *Not complying with legislation of the country of harvest relating to trade and customs, in so far as the forest sector is concerned,* 3. *Utilizing genetically modified forest based organisms,* 4. *Converting forest to other vegetation type, including conversion of primary forests to forest plantations. Where forest plantations are defined as forests of exotic species that are under intensive stand management, are fast growing and subject to short rotations (I.e. Poplar, acacia, or eucalyptus plantations)* Transportation documents, such as transportation certificates (which contain PIDs), scale tickets and bills of lading are effective means of tracing the round wood back to the forest source and secondary fibre back to the sawmill. The BP's annual internal audit (PEFC & SBP) ensures that transportation documents are properly documented and stored; they are compared to scale reports for the same period to ensure that all tickets have been received and all fibre is accounted for. The internal audit also verifies that certified feedstock forest management certificates are still valid. On an annual basis, the BP completes supplier evaluations on 25% of secondary suppliers. The supplier audit, consists of a site visit to review and collect documentation on forest sources (location of the stump) to ensure that feedstock originates from within the supply base. The audit also helps to identify how certified feedstock is traced back to the forest management unit. This control measure provides assurance to the BP that feedstock originates from within the defined supply base. The BP has implemented a purchase wood risk assessment for all round wood purchases. Round wood purchases are evaluated annually; and depending on the associated risk, are either assessed via a desktop forest practice compliance review or with a site visit and field inspection facilitated by the BP. In addition to the BP's audits, the marketing boards conduct SFI BMP surveys and report on a random selection of private wood lots on an annual basis. Source forests are compared to critical habitat areas to ensure that harvests aren't located in these areas. As part of the BP's PEFC DDS system, risk assessments have been completed for each of the provinces in the supply base. In summary, high conservation forests and features have been identified and mapped in the defined supply base.
Means of Verification	Supplier contracts and assertions WWF ecoregion maps Protected areas maps Primary & secondary feedstock sources maps Crown licensee SFM 3rd party audit reports Transportation Certificates, scale tickets, bills of lading Purchase wood risk assessment BP's annual supplier evaluations BP's annual internal audit List of forest tracts for private woodlots BMP manuals SFM standards NB SIC BMP survey and reports (private woodlots) Critical habitat maps (in recovery strategies)

	FSC National Risk Assessment: https://ca.fsc.org/en-ca/standards/national-risk-assessment-01 Species at Risk Act: https://laws-lois.justice.gc.ca/eng/acts/s-15.3/ New Brunswick Protected Natural Areas Act https://www.gnb.ca/legis/bill/editform-e.asp?ID=158&legi=54&num=5 Nova Scotia Endangered Species Act http://nslegislature.ca/legc/statutes/endspec.htm Quebec Sustainable Forest Development Act http://legisquebec.gouv.qc.ca/en/ShowDoc/cs/A-18.1
Evidence Reviewed	All means of verification reviewed
Risk Rating	☑ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	N/A

	Indicator
2.1.2	The Biomass Producer has implemented appropriate control systems and procedures to identify and address potential threats to forests and other areas with high conservation values from forest management activities.
Finding	**About 70-80%** of the BP's feedstock is sustainable forest management (SFM) certified and acquired through the PEFC chain of custody (COC) system. SFM certificate holders are required to maintain forest management and harvest plans consistent with best management practices, particularly with regard to high conservation values. The standards include measures for the protection of forests with exceptional conservation value (SFI) and/or for the maintenance or enhancement of high conservation values in the forest management unit (FSC). Program participants must promptly reforest and maintain ecosystem productivity and conditions capable of supporting naturally occurring species. Furthermore, certificate holders undergo annual 3rd party audits, providing assurance that critical habitat and high conservation value forests are identified, mapped, and conserved. **The remaining ~20-30%** is uncertified feedstock from managed forests; most from private land (~20%) in New Brunswick (NB); a small percentage originates from FSC certified sawmills (<5%) and private woodlots (~2%) in South Eastern Quebec (QC) and some residuals are traced back to Nova Scotia (NS) forests (<1%). Conservation efforts and protection are Canada's approach to help maintain forest ecosystem and biodiversity. Conservation efforts take the form of provincial guidelines that forest operators must follow and include: the retention of trees used by wildlife during harvesting, creation of a mix of tree species - type and age, and ensuring that sections of forest remain connected to meet wildlife habitat needs. Forest protection is the creation of parks or other areas protected legally from industrial activity to preserve healthy ecosystems. These include networks of protected areas to enable wildlife to move from one area to another and habitat for vulnerable plant species. The Global Forest Watch maps the combined conservation value within Canada's intact forest landscapes; the majority of the remaining intact landscapes in Canada are located outside of the BPs defined supply base (https://databasin.org/galleries/0267510a7beb4142a55857290b8f922a#expand=152259%2C152261). In NB, *Protected Natural Areas* (PNA) are mapped and sites of high or unique ecological, historical, cultural or scenic value are preserved. Crown land licensees must identify HCV areas in their forest management plans. The NB provincial government has mapped areas of

	high conservation value including designated conservation forest, special management areas, national & provincial parks and conservation sites (http://www.snb.ca/GeoNB1/e/map-carte/DNR_cf_E.asp). Regional marketing boards represent private woodlots owners in NB. Most of the BP's uncertified primary feedstock originates from managed private woodlots in NB. Marketing boards distribute BMP guides to private woodlot owners or contractors "*Best Management Practices: A Practical Guide to BMP's in New Brunswick's Private Woodlots*". The guide is supported by the SFI Implementation Committee in New Brunswick and lays out similar objectives to the SFI forest management standard, including objectives for forests with exceptional conservation value. Marketing boards assist landowners in identifying HCV areas and addressing any threats in the landowners' forest management plans. Marketing boards will sometimes offer SFI logger training or workshops to private woodlot owners and contractors. A private woodlot silviculture program is available through the provincial government and a manual is available to participants (*New Brunswick Private Woodlot Silviculture Manual*). Silviculture contracts (i.e. Landowner Agreements) between the marketing board and woodlot owners provide assurance that BMPs are followed and prescribed for each forest management unit. Performance monitoring and random inspections are completed by provincial government staff and the regional marketing boards. All privately owned property greater than 10 ha is eligible for silviculture funding and forest management assistance. Sustainable forestry initiatives laid out in the treatment plan must be followed to be eligible for subsequent treatments under the program. All private woodlots must comply with the *Clean Water Act*, the *Forest Products Act*, the *Natural Products Act*, the *Forest Fires Act*, the *Transportation of Primary Forest Products Act*, and the *Pesticides Control Act*. Any violations identified during an audit are reported to the appropriate authorities. In Nova Scotia, high conservation value habitats are protected under the *NS Endangered Species Act*. On private lands, designation and protection require agreement with the landowner; however, active stewardship programs and recovery strategies have been effective at conserving critical habitat and high conservation value areas in the province. *Nova Scotia's Forest Sustainability Act* requires that buyers of more than 5,000 cubic metres of private primary forest products must pay directly to a sustainable forestry fund or carry out silviculture activities on privately owned land. In Quebec, high conservation value forests are protected through the *Sustainable Forest Development Act*. The Minister may designate a forest as an exceptional forest ecosystem, and all forest development activities are prohibited in these forests. Forest management plans for harvest sites identify areas of high conservation value. The Quebec Federation of Woodlot Owners (FPFQ) has released the "*Sound Forestry Practices for Private Woodlots Field Guide*" and this is used by small woodlot owners and contractors to promote responsible forest management. The guide is supported by SFI and is the same guide used by SFI program participants when procuring wood through SFI Fibre Sourcing Standard requirements. In general, avoidance measures and best management practices are the key ways that forest operations remove threats to high conservation value forests. Forests having high or exceptional conservation value are often protected through federal and provincial legislation (i.e. *Protected Natural Areas Act, Parks Act*, *Crown Lands Act*, etc.), and become National or Provincial Parks or wildlife reserves. The Canadian Wildlife Service, Environment Canada, Fisheries and Oceans Canada, and Parks Canada Agency all work together to enforce federal legislation. Provincial governments enforce legislation on the protection of species and conservation areas from encroachment through mechanisms such as permitting, monitoring and issuance of fines or charges for infringement (FSC National Risk Assessment, 2020). Three WWF ecoregions have been identified and mapped for the supply base, the Eastern Canadian Forest, the New England Acadian Forest, and the Gulf of St. Lawrence Lowland Forest. The *FSC National Risk Assessment for Canada* [FSC NRA] (2020) has been utilized to further assess the risk for HCV in the supply base. There are 6 HCV features identified in the FSC NRA: • HCV 1: Species Diversity • HCV 2: Landscape-level ecosystems and mosaics • HCV 3: Ecosystems and Habitat

- HCV 4: Critical Ecosystem Services
- HCV 5: Community Needs
- HCV 6: Cultural values

HCV 1, species diversity, is evaluated based on the species identified by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) – a panel of expert Canadian scientists, as a basis for the determination of risk. COSEWIC makes recommendations to the Minister of Environment, and the minister will create listing plans and evaluate whether the species is added to the *Species at Risk Act* (SARA). Recovery plans are created for species added to SARA.

In the FSC NRA (2020), HCV 1 (Species Diversity) was identified as having specified risk for two of the three ecoregions in the supply base. The Eastern Canadian Forests and the New England Acadian Forests have specified risk, whereas the Gulf of St. Lawrence Lowland Forests have low risk.

The assessment identifies areas with specified risk for HCV 2 (Landscape Level Ecosystems and Mosaics) by identifying forest landscapes that have specified risk on a map (See figure 2.1.1-1). Currently, the biomass producer does not procure fibre from any areas within the red specified risk regions identified on the map.

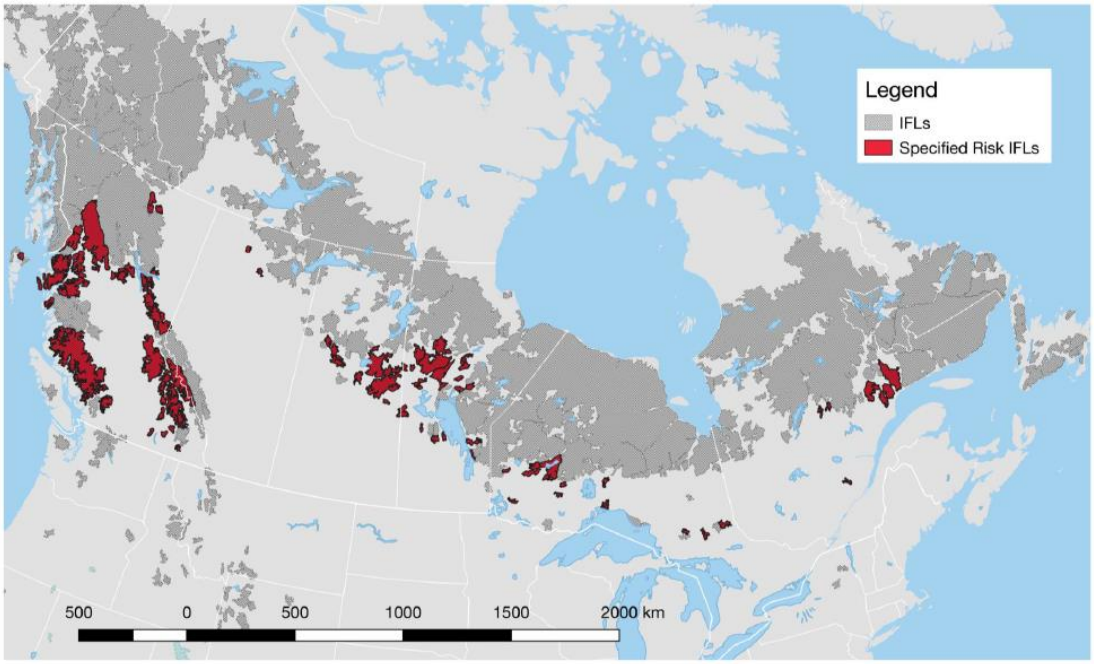
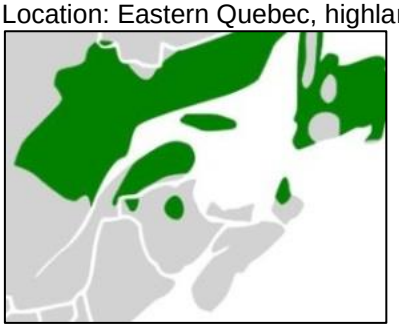


Figure 2.1.2-1 Map of Specified Risk IFLs from National Risk Assessment for Canada: HCV2 (FSC-NRA-CA V2-1, National Risk Assessment for Canada, 2020)

Eastern Canadian Forest

Location: Eastern Quebec, highlands of New Brunswick and Cape Breton, Newfoundland



Of the 33 forested ecoregions in Canada, the *WWF Conservation Status Index* lists the

Eastern Canadian Forest as critical/endangered and it is mapped above. The FSC NRA identifies this ecoregion at a low risk for the following HCV indicators for this ecoregion:

HCV 3: Ecosystems and Habitat
HCV 4: Critical Ecosystem Services
HCV 5: Community Needs
HCV 6 Cultural values

The assessment identifies the Eastern Canadian Forest as a specified risk for HCV 1. The risk assessment had two approaches for identifying HCV 1 forests, and included concentrations of SAR critical habitat and critical habitat for SAR of special significance. The Species Richness Ratio for the Eastern Canadian Forest is 4.57. For HCV 1, areas within each forested ecoregion where critical habitat was identified in recovery strategies (under the federal Species at Risk Act) were used in determining areas of specified risk. In the Eastern Canadian Forest, the American Marten's Newfoundland population was designated as specified risk. Since the biomass producer does not procure fibre in the regions where this population exists, it has been given a low risk rating.

About 40% of this ecoregion remains as intact habitat. The majority of intact habitat occurs along the northern portions of the ecoregion in Quebec (*outside of defined supply base*). No major intact habitat blocks remain in Gaspé (Québec) outside of protected areas (https://www.worldwildlife.org/ecoregions/na0605).

This indicator is considered a low risk for Eastern Canadian Forests in the Biomass Producer's defined supply base because:

- Most of this ecoregion is outside of the defined supply base (Northern Quebec and Newfoundland). Eastern Canadian Forests within the defined supply base are in NB and Cape Breton Highlands, NS, which are outside of the procurement area for primary and secondary fibre suppliers.

- Most Eastern Canadian Forest regions in the supply base are designated as protected areas (In Gaspe, QC & Cape Breton Highlands, NS) or are located on NB Crown lands. HCV sites are avoided during harvests under current management practice recommendations included in BMP manuals and guidelines. Most Crown land is SFM certified, so forest management plans are 3rd party audited to recognized forest management standards.

- The WWF has mapped and identified areas of high conservation value, and the FSC NRA (2020) has evaluated risks associated with these and have identified areas with specified risk. The FSC NRA (2020) identified a specified risk for HCV 1 for the Newfoundland population of the American Marten. This population is not located within the defined supply base. The FSC NRA (2020) also identified specified risk for some Intact Forest Landscapes (HCV 2) in this region; however, they are also outside of the defined supply base as can be seen on Figure 2.1.1-1.

New England Acadian Forest

Location: Southern Quebec, half of New Brunswick and most of Nova Scotia

The WWF Conservation Status Index lists the New England Acadian Forest as

critical/endangered and a map is shown above. The FSC NRA identifies this ecoregion at a low risk for the following HCV indicators:

HCV 2: Landscape-level ecosystems and mosaics
HCV 4: Critical Ecosystem Services
HCV 5: Community Needs
HCV 6 Cultural values

The assessment identifies New England Acadian Forests as having specified risk for HCV 1 (Species Diversity). Critical Habitat for Rainbow Smelt (Lake Utopia small-bodied population), Furbish's Lousewort, Blanding's Turtle, and Van Brunt's Jacob's-ladder are located within some regions of the New England Acadian Forest.

The BP identifies the New England Acadian Forest at a low risk for this indicator because:

- The WWF has mapped and identified areas of high conservation value, and the FSC NRA (2020) has evaluated risks associated with High Conservation Values in the New England Acadian Forest ecoregion. The assessment identified areas with specified risk within the defined supply base with regards to critical habitat, which will be discussed further in section 2.2.4 on biodiversity.

- Best management practices are implemented in the areas where these forests are harvested. Forest Management Plans identify and map areas of High Conservation Value. Furthermore, areas designated as HCV are often protected provincially or federally as parks or protected areas.

Gulf of St. Lawrence Lowland Forest

Location: Prince Edward Island, parts of New Brunswick and western coast of Nova Scotia

The WWF Conservation Status Index lists the Gulf of St. Lawrence Lowland Forest as critical/endangered and it is mapped as shown above. The FSC NRA (2020) identifies this ecoregion at a low risk for the following HCV indicators:

- HCV 1: SAR Critical Habitat
- HCV 2: Landscape-level ecosystems and mosaics
- HCV 3. Ecosystems and habitats
- HCV 4: Critical ecosystem services
- HCV 5: Community needs
- HCV 6: Cultural values

The BP identifies the Gulf of St. Lawrence Lowland Forest at a low risk for this indicator because:

- The WWF has mapped and identified areas of high conservation value, and the FSC NRA (2020) has given a low risk rating for all of the HCV indicators
- Best management practices are implemented in the areas where these forests are harvested and areas of High Conservation Value are identified in forest management plans.

The BP's PEFC chain of custody and environmental management system allow for the effective tracking of feedstock back to the forest source. Transportation documents, such as

	transportation certificates (which contain PIDs), scale tickets, trip tickets, and bills of lading are effective means of tracing the round wood back to the forest and sawmill residuals back to the sawmill. The BP's annual internal audit ensures that transportation documents are properly documented and stored; they are compared to scale reports for the same period to ensure that all tickets have been received and all fibre is accounted for. The internal audit also verifies the validity of forest management certificates. Supplier contracts and assertions provide assurance to the BP that suppliers adhere to local, provincial and federal legislation. On an annual basis, the BP completes supplier evaluations on 25% of secondary suppliers. The supplier audit consists of a site visit to review and collect documentation on forest sources (location of the stump) to ensure that feedstock originates from within the supply base, and to identify how certified feedstock is traced back to the forest management unit. This control measure provides assurance to the BP that feedstock originates from within the defined supply base. The BP has implemented a purchase wood risk assessment for all round wood purchases. Round wood purchases are evaluated annually; and depending on the associated risk, may be assessed based on forest practice compliance or have site visits and field inspections facilitated by the BP. In addition, the marketing boards conduct SFI BMP surveys and reports on a random selection of private wood lots annually. Risk assessments have been completed for each of the 3 provinces as part of the BP's PEFC due diligence system. In summary, on a large scale, high conservation areas are documented and mapped through a variety of sources including NGO's (i.e. WWF, NCC, etc.), national risk assessments (i.e. FSC) and provincial and federal governments. Regional high conservation areas are further identified in regional and provincial reports and through forest management plans for each forest management unit. Forest management plans are required for all Crown lands and any private land assigned to provincially funded silvicultural programs. When HCV areas are identified in forest management plans, control measures are put in place to reduce the threat to each HCV indicators, as described in BMP manuals. All certified suppliers must adhere to HCV requirements though their SFM certificates for their certified forest management units. Non-certified sources are required to adhere to BMPs to be considered for silviculture funding contracts. With extensive ongoing research, conservation efforts and protection in the supply base area, the BP assigns a low risk to this indicator as the high conservation values have been identified and addressed for potential threats from forest management activities.
Means of Verification	Supplier contracts and assertions Landowner agreement SFM standards BMP and silviculture guides for private woodlots BP's purchase wood risk assessment BP's EMS manual Transportation Certificates, scale tickets, bills of lading Maps of primary & secondary feedstock sources List of forest tracts for private woodlots NB SIC BMP survey and reports (private woodlots) WWF maps PEFC wood procurement processes 3rd party Crown licensee forest audits SFM certificates List of Applicable laws and regulations Quebec provincial government maps: https://mffp.gouv.qc.ca/le-ministere/cartes-plans/ GNB conservation map: http://www.snb.ca/GeoNB1/e/map-carte/DNR_cf_E.asp WWF: https://www.worldwildlife.org\ FSC National Risk Assessment: https://ca.fsc.org/en-ca/standards/national-risk-assessment-01

	Global Forest Watch Intact Forest Maps: https://databasin.org/galleries/0267510a7beb4142a55857290b8f922a#expand=152259%2C152261
Evidence Reviewed	All means of verification reviewed
Risk Rating	☑ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	N/A

	Indicator
2.1.3	The Biomass Producer has implemented appropriate control systems and procedures for verifying that feedstock is not sourced from forests converted to production plantation forest or non-forest lands after January 2008.
Finding	The BP's PEFC Chain of Custody system is an effective means of tracking forest products back to the source. Transportation documents, such as transportation certificates (which contain PIDs), scale tickets, and bills of lading are effective means of tracing the round wood back and wood chips back to the forest source and secondary fibre back to the sawmill. The BP's annual internal audit ensures that transportation documents are properly documented and stored; they are compared to scale reports for the same period to ensure that all tickets have been received and all fibre is accounted for. On a quarterly basis the BP also verifies the validity of forest management certificates. The supply base is traceable back to the defined supply base (Indicator 1.1.2). **About 70-80%** of the BP's feedstock is forest management (FM) certified and acquired through the PEFC chain of custody (COC) system. SFM certificate holders are required to maintain forest management and harvest plans consistent with best management practices. The standards require the protection of forestlands from deforestation and conversion. Program participants must promptly reforest and maintain ecosystem productivity and conditions capable of supporting naturally occurring species. Furthermore, certificate holders undergo annual 3rd party audits to ensure that practices are consistent with SFM standards. **The remaining ~20-30%** is uncertified feedstock from managed forests; most from private land (~20%) in New Brunswick (NB); a small percentage originates from FSC certified sawmills (<5%) and private woodlots (~2%) in South Eastern Quebec (QC) and some residuals are traced back to Nova Scotia (NS) forests (<1%). In NB, regional marketing boards represent private woodlots owners in the province. Marketing boards distribute BMP guides to private woodlot owners or contractors "*Best Management Practices: A Practical Guide to BMP's in New Brunswick's Private Woodlots*". The guide is supported by the SFI Implementation Committee in NB and lays out similar objectives to the SFI FM standard. The marketing boards assist private woodlot owners or contractors with forest management plans and mapping when needed, and will often offer SFI logger training to private woodlot owners and contractors in their region. A private woodlot silviculture program is available through the provincial government and a manual is available to participants (*NB Private Woodlot Silviculture Manual*). Silviculture contracts (i.e. Landowner Agreements) between the marketing board and woodlot owners provide assurance that the site is being reforested and not converted to another land use. Furthermore, performance monitoring and random inspections are completed by provincial government staff and marketing boards. All privately owned property greater than 10 ha are eligible for silviculture funding and forest management assistance.

	Sustainable forestry initiatives laid out in the treatment plan must be followed to be eligible for subsequent treatments under the program. Forest management plans on Crown lands aim to include strategies for regenerating forests with principal characteristics of the native ecosystems for that site using natural and artificial regeneration. Since 2006, Canada has been monitoring deforestation through the *National Deforestation Monitoring System* (NDMS). In the NDMS, deforestation is the conversion of forest land to non-forest land use. The NDMS provides deforestation rates by region and their drivers. The FSC NRA (2020) evaluated conversion of natural forests to plantations or non-forest use over the last 5 years using the NDMS. Forestry activities have shown to have little to no overall impact on the amount of conversion of forests to non-forest; agriculture, urbanization, mining, oil and gas development are responsible for conversion (FSC NRA, 2020). Even though there is little impact from forestry, the assessment identified 3 regions (Quebec Mixedwood Plains, Alberta Boreal Plains, and BC Boreal Plains) as having specified risk because the regions had exceeded the 0.02% deforestation threshold. The 3 identified regions are outside of the biomass producers defined supply base. As of 2011, 0.008% of Canada's forested land was reported to Agriculture & Agri-Food Canada as hybrid poplar plantations. However, most of these were created through the reforestation of agricultural lands rather than through deforestation. Canadian forests are healthy, productive and thriving; the annual deforestation rate was less than 0.02% of forests in 2010 and has been declining. The Canadian government monitors and regularly publishes reports on deforestation. 94% of Canada's forests are on public land and according to laws, regulations, and policies across the country, all public land must be reforested either by replanting or natural regeneration (https://www.nrcan.gc.ca/forests/fire-insects-disturbances/deforestation/13419). Supplier contracts provide assurance to the BP that suppliers adhere to local, provincial and federal legislation. Feedstock is not sourced from plantations or lands being converted to other uses (i.e. agricultural lands). Prior to bringing any feedstock onto the site, all suppliers are required to sign an assertion that states the following: *The supplier confirms that round wood and wood fibre don't originate from unacceptable or controversial sources, which include sources that are:* *1. Not complying with local, national or international legislation, in particular:* *a. forestry operations and harvesting, including biodiversity conservation and conversion of forest to other use* *b. management of areas with designated high environmental and cultural values, protected and endangered species, including requirements of CITES,* *c. health and labour issues relating to forest workers, indigenous peoples' property, tenure and use rights, third parties' property, tenure and use rights,* *d. payment of taxes and royalties related to timber harvesting are complete and up to date,* *2. Not complying with legislation of the country of harvest relating to trade and customs, in so far as the forest sector is concerned,* *3. Utilizing genetically modified forest based organisms,* *4. Converting forest to other vegetation type, including conversion of primary forests to forest plantations. Where forest plantations are defined as forests of exotic species that are under intensive stand management, are fast growing and subject to short rotations (I.e. Poplar, acacia, or eucalyptus plantations)* On an annual basis, the BP completes supplier evaluations on 25% of secondary suppliers. The internal supplier audit consists of a site visit to review and collect documentation on forest sources (location of the stump) to ensure that feedstock originates from within the supply base, and to identify how certified feedstock is traced back to the forest management unit. This control measure provides assurance to the BP that feedstock originates from within the defined supply base of the SBE.

	The BP has implemented a purchase wood risk assessment for all round wood purchases. Round wood purchases are evaluated annually; and depending on the associated risk, may be assessed based on forest practice compliance or have site visits and field inspections facilitated by the BP. In addition, the marketing boards conduct SFI BMP surveys and reports on a random selection of private wood lots annually. Risk assessments have been completed for each of the 3 provinces as part of the BP's PEFC due diligence system. In summary, the supply base is considered to be a low risk for forest conversion to non-forested land or plantations. There are no plantations in the supply base and best management practices ensure there is adequate protection from deforestation and conversion.
Means of Verification	Supplier contracts and assertions Silviculture contracts BP's purchase wood risk assessment BP's annual supplier evaluations SFM standards BMP manuals Transportation certificates, scale tickets, bills of lading NB, NS and QC risk assessments BP's annual internal audit List of forest tracts for private woodlots NB SIC BMP survey and reports (private woodlots) Crown licence forest audits Provincial and federal government reports and maps Canada's National Deforestation Monitoring System: http://cfs.nrcan.gc.ca/publications?id=36042 Deforestation in Canada: https://www.nrcan.gc.ca/forests/fire-insects-disturbances/deforestation/13419 FSC National Risk Assessment: https://ca.fsc.org/en-ca/standards/national-risk-assessment-01
Evidence Reviewed	All means of verification reviewed
Risk Rating	☑ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	N/A

	Indicator
2.2.1	The Biomass Producer has implemented appropriate control systems and procedures to verify that feedstock is sourced from forests where there is appropriate assessment of impacts, and planning, implementation and monitoring to minimise them.
Finding	The supply base is traceable back to the defined supply base (Indicator 1.1.2). **About 70-80%** of the BP's feedstock is sustainable forest management (SFM) certified and acquired through the PEFC chain of custody (COC) system. SFM certificate holders are required to maintain forest management and harvest plans consistent with best management practices. Forests certified to SFM standards are required to maintain operating and harvest plans demonstrating BMPs and complete annual 3rd party audits. **The remaining ~20-30%** is uncertified feedstock from managed forests; most from private land (~20%) in New Brunswick (NB); a small percentage originates from FSC certified

	sawmills (<5%) and private woodlots (~2%) in South Eastern Quebec (QC) and some residuals are traced back to Nova Scotia (NS) forests (<1%). In New Brunswick (NB), regional marketing boards represent private woodlots owners in the province. Marketing boards distribute best management practice (BMP) guides to private woodlot owners or contractors "*Best Management Practices: A Practical Guide to BMP's in New Brunswick's Private Woodlots*". The guide is supported by the SFI Implementation Committee in NB and lays out similar objectives to the SFI FM standard. The marketing boards assist private woodlot owners or contractors with forest management plans and mapping when needed, and will often offer SFI logger training to private woodlot owners and contractors in their region. Private woodlots must follow best management practices and have operating/harvesting plans for consideration of silviculture funding. In NB, a contract between the marketing board and the woodlot owner/contractor specifies that all silviculture work must be completed in accordance with local standard and practices of the Department of Natural Resources. The *NB Private Woodlot Silviculture manual* sets the guideline and regulations governing activities on private woodlots. On NB Crown land, harvest plans are developed and include detailed maps of harvest blocks, roadways, watercourse crossings, and high conservation areas. The provincial forest authorities have inspectors to ensure that forest operators respect harvesting regulations. Forest operators on Crown land are required to implement environmental impact control measures, and those that don't can receive penalties, fines, suspension of licence, timber seizure, or even imprisonment. *Nova Scotia's Code of Forest Practice* states that forest management will be designed and conducted in a manner that maintains and enhances the quality of air, water, and soil. The BMP manual developed by the Nova Forest Alliance for contractors and operators provides guidelines for assessing and preventing negative environmental impacts. In Quebec, The *Sustainable Forest Development Act* and BMP manual (Saines Pratiques D'Intervention en Foret Privee, Guide Terrain, 4E, 2016) provide the guidelines for constructing forest management plans. The Minister of Natural Resources (MRN) is responsible for all forest management plans on Crown lands. Confirmation of management practices is part of the supplier risk assessment and monitoring system. Annual audits ensure that appropriate control measures are in place to prevent environmental impacts. Harvesting regulations and guidelines on environmental impacts in the defined supply base are elaborated under provincial forest acts (i.e. NB Crown Lands and Forests Act, NS Forests Act, and QC's Sustainable Forest Development Act). These acts and associated guidelines require forest managers to assess and manage the environmental impacts to soil, water and biodiversity. The provincial forest authorities are responsible for carrying out audits, detailed investigations, issuing warnings, fines, penalties, and prosecution for serious infractions through the court system (https://www.nrcan.gc.ca/forests/canada/laws/17497). Forest management in Canada is based on nationally recognized standards for the long term protection and development of the forest. Canada's forest laws are some of the strictest in the world and are based on sustainable forest management principles, scientific research and analysis, and developed with public consultation (https://www.nrcan.gc.ca/forests/canada/laws/17497). In 2015, Canada adopted the United Nations' 17 Sustainable Development Goals identified in the *2030 Agenda for Sustainable Development*. Data collected over time will provide essential information about the state and trends of Canada's forests, highlight needs for improvement in forest management policy and practice, and supply reliable information for discussions and initiatives related to environmental performance as discussed in the 2018 *State of Canada's Forest Annual Report* (http://cfs.nrcan.gc.ca/publications/download-pdf/39336). On an annual basis, the BP completes supplier evaluations on 25% of secondary suppliers. The internal supplier audit consists of a site visit to review and collect documentation on forest sources (location of the stump) to ensure that feedstock

	originates from within the supply base, and to identify how certified feedstock is traced back to the forest management unit. This control measure provides assurance to the BP that feedstock originates from within the defined supply base of this evaluation. The BP has implemented a purchase wood risk assessment for all round wood purchases. Round wood purchases are evaluated annually; and depending on the associated risk, may be assessed based on forest practice compliance or have site visits and field inspections facilitated by the BP. In addition, the marketing boards conduct SFI BMP surveys and reports on a random selection of private wood lots on an annual basis. Supplier contracts and assertions provide some assurance that suppliers are adhering to local, provincial and federal legislation. Risk assessments have been completed for each of the 3 source provinces as part of the BP's PEFC due diligence system. Similar to the FSC NRA (2020), and based on the above findings, this indicator has been designated as low risk.
Means of Verification	Supplier contracts and assertions Crown licensee audits 3rd party forest management audits SFM certificates Transportation certificates, scale tickets, bills of lading PEFC due diligence system BP's annual supplier evaluations BP's purchase wood risk assessment BMP manuals NB SIC BMP survey and reports (private woodlots) NB private woodlot silviculture program and funding agreement List of applicable laws and regulations 2019 State of Canada's Forest Annual Report https://d1ied5g1xfgpx8.cloudfront.net/pdfs/40084.pdf 2030 Agenda for Sustainable Development https://sustainabledevelopment.un.org/post2015/transformingourworld FSC National Risk Assessment: https://ca.fsc.org/en-ca/standards/national-risk-assessment-01 Natural Resources Canada on Canada's Forest Laws: https://www.nrcan.gc.ca/forests/canada/laws/17497
Evidence Reviewed	All means of verification reviewed
Risk Rating	☑ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	N/A

	Indicator
2.2.2	The Biomass Producer has implemented appropriate control systems and procedures for verifying that feedstock is sourced from forests where management maintains or improves soil quality (CPET S5b).
Finding	The supply base is traceable back to the defined supply base (Indicator 1.1.2). **About 70-80%** of the BP's feedstock is sustainable forest management (SFM) certified and acquired through the PEFC chain of custody (COC) system. SFM certificate holders are required to maintain forest management and harvest plans consistent with best management practices (BMP). Furthermore, certificate holders undergo annual 3rd party audits to ensure that practices are consistent with SFM standards. **The remaining ~20-30%** is uncertified feedstock from managed forests; most from private land (~20%) in New Brunswick (NB); a small percentage originates from FSC certified sawmills (<5%) and private woodlots (~2%) in South Eastern Quebec (QC) and some residuals are traced back to Nova Scotia (NS) forests (<1%). Harvesting regulations and guidelines on environmental impacts to soils are elaborated in each of the provinces' forest acts (i.e. *NB Crown Lands and Forests Act, NS Forests Act,* and *QC's Sustainable Forest Development Act*). These acts and associated guidelines require forest managers to assess and manage the environmental impacts to soil quality. The provincial forest authorities are responsible for carrying out audits, detailed investigations, issuing warnings, fines, penalties, and prosecution for serious infractions (https://www.nrcan.gc.ca/forests/canada/laws/17497). BMPs in place for each province provide guidance for the management of soils. **New Brunswick** The *2009 Biodiversity Strategy* was developed by the provincial government as a comprehensive plan aiming to conserve genetic, species and ecosystem diversity and these are used and managed in a sustainable manner to achieve biodiversity goals. The Crown forest management is established under the *Crown Lands and Forest Act* and is monitored by the Department of Natural Resources (DNR) and citizens of NB. The government sets objectives and standards for management of the lands; licensees are responsible for achieving those objectives. Under the Act, the Minister of Natural Resources evaluates Crown forest management performance on a five year cycle. The evaluation results are used to determine whether the forest management agreement with each Licensee is extended or terminated. Most Crown forests in the province are SFM certified and undergo annual 3rd party audits. BMPs laid out in SFM standards provide guidance for the protection of soils. The forest management manual for NB Crown lands also includes guidance for the preservation of soil function, processes and health. To sustain this, harvesters must minimize rutting and environmental contamination at the site, as well as prevent the permanent loss of productive forest area from heavy harvest debris. Regional marketing boards represent private woodlots owners in the province. Marketing boards distribute BMP guides to private woodlot owners and contractors "*Best Management Practices: A Practical Guide to BMP's in New Brunswick's Private Woodlots*". The guide is supported by the SFI Implementation Committee in NB and lays out similar objectives to the SFI FM standard. The BMP guide provides guidance for managing harvesting debris (slash), tree tops, and coarse woody debris (fallen dead wood). Marketing boards assist private woodlot owners or contractors with forest management plans and mapping when needed, and will often offer SFI logger training to private woodlot owners and contractors. Marketing boards' complete annual audits and reports on a random selection of private woodlots. The annual audit assesses the use of BMPs on each site; in particular the survey requires an assessment on whether ruts are minimized and if the site is clean of fuel spills. Adherence to the *Clean Water Act* and *Watercourse Buffer Zone guidelines* are

	required in private and Crown forests. Private woodlots can acquire funding for the preparation of a management plan, which includes forest stand description, access roads, treatment recommendations, and long term resource consideration (wetlands, forest health, protection from fires and insects, biodiversity, wildlife habitat, etc.). Private woodlots must follow BMPs and have operating/harvesting plans for consideration of silviculture funding. An agreement between the marketing board and the woodlot owner/contractor specifies that all silviculture work must be completed in accordance with local standards and practices of DNR. The *New Brunswick Private Woodlot Silviculture manual* lists the rules and regulations governing activities on private woodlots. **Nova Scotia** *Nova Scotia's Code of Forest Practice* states that forest management will be designed and conducted in a manner that maintains and enhances the quality of air, water, and soil. The *Wildlife Habitat and Protection Regulations*, made under section 40 of the *Forests Act* have several requirements including: 1) Legacy trees and habitat structure, which includes specific regulations in regards to number of trees, proportion of species, average height and diameter, and clump size, 2) Special Management Zones for watercourses (> 50 cm wide), and 3) Protection of watercourses (< 50 cm wide). The BMP manual developed by the Nova Forest Alliance for contractors and operators provides guidelines for assessing ground vegetation and soil types, so that soil compaction and rutting hazards can be determined and managed effectively. **Quebec** The *Sustainable Forest Development Act* is a guideline when constructing forest management plans in QC. The Minister of Natural Resources (MRN) is responsible forest management on Crown lands. Confirmation of management practices is part of the supplier risk assessment and monitoring system. The QC BMP manual provides guidelines to minimize rutting and erosion to preserve and maintain soil function (Saines Pratiques D'Intervention en Foret Privee, Guide Terrain, 4E, 2016). Annual audits ensure that appropriate control measures are in place for maintaining or improving soil quality. The supply base is defined and can be traced back to the forest management unit (Indicator 1.1.2). Supplier contracts and assertions have clauses requiring adherence to all applicable legislation. Risk assessments have been completed for each of the 3 provinces through the BP's PEFC due diligence system. On an annual basis, the BP completes supplier evaluations on 25% of secondary suppliers. The internal supplier audit consists of a site visit to review and collect documentation on forest sources (location of the stump) to ensure that feedstock originates from within the supply base, and to identify how certified feedstock is traced back to the forest management unit. This control measure provides assurance to the BP that feedstock originates from within the defined supply base of the SBE. The BP has implemented a purchase wood risk assessment for all round wood purchases. Round wood purchases are evaluated annually; and depending on the associated risk, may be assessed based on forest practice compliance or have site visits and field inspections facilitated by the BP. In addition, the marketing boards conduct SFI BMP surveys and reports on a random selection of private wood lots on an annual basis.

Means of Verification	Supplier contracts and assertions NB SIC BMP survey and reports (private woodlots) BP's annual supplier evaluations BP's Purchase Wood Risk Assessment BMP manuals NB, NS, QC risk assessments NB Private Woodlot Silviculture Program and funding agreement List of applicable laws and regulations 2009 Biodiversity Strategy: *www2.gnb.ca/content/dam/gnb/Departments/nr-rn/pdf/en/.../Biodiversity.pdf* FSC National Risk Assessment: https://ca.fsc.org/en-ca/standards/national-risk-assessment-01
Evidence Reviewed	All means of verification reviewed
Risk Rating	☑ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	N/A

	Indicator
2.2.3	The Biomass Producer has implemented appropriate control systems and procedures to ensure that key ecosystems and habitats are conserved or set aside in their natural state (CPET S8b).
Finding	The supply base is traceable back to the defined supply base (Indicator 1.1.2). **About 70-80%** of the BP's feedstock is sustainable forest management (SFM) certified and acquired through the PEFC chain of custody (COC) system. SFM certificate holders are required to maintain forest management and harvest plans consistent with best management practices (BMP). Furthermore, certificate holders undergo annual 3rd party audits to ensure that practices are consistent with SFM standards. **The remaining ~20-30%** is uncertified feedstock from managed forests; most from private land (~20%) in New Brunswick (NB); a small percentage originates from FSC certified sawmills (<5%) and private woodlots (~2%) in South Eastern Quebec (QC) and some residuals are traced back to Nova Scotia (NS) forests (<1%). Conservation efforts and forest protection are Canada's approach to help maintain forest ecosystem and biodiversity. Conservation efforts include provincial guidelines that forest companies must follow, which include retention of trees used by wildlife during harvesting, creation of a mix tree species type and age, and ensuring that sections of forest remain connected to meet wildlife habitat needs. Forest protection is the creation of parks or other areas protected legally from industrial activity to preserve healthy ecosystems. These include networks of protected areas to enable wildlife to move from one area to another and habitat for vulnerable plant species. The Global Forest Watch maps conservation values in Canada's intact forest landscapes; the majority of the remaining intact landscapes in Canada are located outside of the BP's defined supply base (https://databasin.org/galleries/0267510a7beb4142a55857290b8f922a#expand=152259%2C152261). Canada's *Wildlife Act* allows for the creation, management and protection of wildlife areas to preserve habitats that are critical to migratory birds and other wildlife species, particularly those that are at risk. All commercial activities are prohibited on the site unless a permit is issued. A guide "*How Much Habitat is Enough*" is effectively a framework to serve as a starting point for

	developing strategies to conserve habitat and discuss research needs around those habitats. The framework includes guidelines for wetland, riparian and watershed, forest and grassland habitat. Soil and water resources are quintessential to the health, vitality and conservation of Canadian ecosystems and habitats. 7% of Canadian forests (24 million hectares) are designated as protected areas. The National Parks Act was developed to help create and manage these protected areas. Many areas considered high conservation value forest are protected through federal and provincial government legislation (i.e. Protected Natural Areas Act, Parks Act, Crown Lands Act, etc.) and have become national or provincial parks or wildlife reserves. Each provincial government is responsible for the management of their forest resource. They have the power to develop and enforce legislation, regulations, standards and programs to ensure the conservation and management of the forest. Forest management in Canada is based on nationally recognized standards for the long term protection and development of the forest. Canada's forest laws are some of the strictest in the world and are based on sustainable forest management principles, scientific research and analysis, and developed with public consultation (https://www.nrcan.gc.ca/forests/canada/laws/17497). In 2015, Canada adopted the United Nations' 17 Sustainable Development Goals identified in the *2030 Agenda for Sustainable Development*. Data collected over time helps to a) provide essential information about the state and trends of Canada's forests, b) highlight needs for improvement in forest management policy and practice, and c) supply reliable information for discussions and initiatives related to environmental performance. These are discussed in the 2018 *State of Canada's Forest Annual Report* (http://cfs.nrcan.gc.ca/publications/download-pdf/39336). **New Brunswick** Crown forest land licensees in NB are required to implement BMPs for the conservation of key ecosystems and habitats. Crown forest management in NB is established under the *Crown Lands and Forest Act* and is monitored by the Department of Natural Resources (DNR) and citizens of NB. Under the Act, the Minister of Natural Resources evaluates Crown forest management performance on a five year cycle. Most Crown forests in the province are SFM certified and undergo annual 3rd party audits. Regional marketing boards represent private woodlots owners in the province. Marketing boards distribute BMP guides to private woodlot owners and contractors "*Best Management Practices: A Practical Guide to BMP's in New Brunswick's Private Woodlots*". The guide is supported by the SFI Implementation Committee in NB and lays out similar objectives to the SFI FM standard. Marketing boards assist private woodlot owners or contractors with forest management plans and mapping when needed, and often offer SFI logger training to private woodlot owners and contractors. Marketing boards' complete annual audits on a random selection of private woodlots and these data are summarized in an annual report. Private woodlots can acquire funding for the preparation of a management plan, which includes forest stand description, access roads, treatment recommendations, and long term resource consideration (wetlands, forest health, protection from fires and insects, biodiversity, wildlife habitat, etc.). Private woodlots must follow best management practices and have operating/harvesting plans for consideration of silviculture funding. An agreement between the marketing board and the woodlot owner/contractor specifies that all silviculture work must be completed in accordance with local standards and practices of the Department of Natural Resources. The *New Brunswick Private Woodlot Silviculture manual* lists the rules and regulations governing activities on private woodlots. Adherence to the Clean Water Act and Watercourse Buffer Zone guidelines is also required in both private and Crown forests in NB. **Nova Scotia** The NS Code of Forest Practice states that forest management will be designed and conducted in a manner that maintains and enhances the quality of air, water, and soil. The watercourse and wildlife habitat protection regulations require that on Crown and private

	lands that buffer strips must be left along watercourses, legacy trees must be left in clumps, and coarse woody debris must be left in all types of forest harvesting and management activities. BMP manuals are provided to private woodlot owners through regional organizations who assist with forest management planning. Private woodlot owners are encouraged to adopt BMPs and must conform to the NS *Forests Act*. **Quebec** In QC, the *Sustainable Forest Development Act* is used as a guideline when constructing forest management plans. The Minister of Natural Resources (MRN) is responsible for all forest management plans on Crown lands. Confirmation of management practices is part of the supplier risk assessment and monitoring system for Crown lands. Annual audits ensure that appropriate control measures are in place for the protection and conservation of biodiversity. The QC BMP manual provides guidelines to for the conservation of key habitats and ecosystems (*Saines Pratiques D'Intervention en Foret Privee, Guide Terrain, 4E, 2016*). Supplier contracts have a clause requiring adherence to all applicable legislation. Suppliers must also sign an assertion declaring that all feedstock originates from within the BP's defined supply base. The supply base is defined and can be traced back to the forest management unit (Indicator 1.1.2). As part of the BP's PEFC due diligence system, risk assessments have been completed for each province in the supply base. On an annual basis, the BP completes supplier evaluations on 25% of secondary suppliers. The supplier audit consists of a site visit to review and collect documentation on forest sources (location of the stump) to ensure that feedstock originates from within the supply base, and to identify how certified feedstock is traced back to the forest management unit. This control measure provides assurance to the BP that feedstock originates from within the defined supply base of the SBE. The BP has implemented a purchase wood risk assessment for all round wood purchases. Round wood purchases are evaluated annually; and depending on the associated risk, may be assessed based on forest practice compliance or have site visits and field inspections facilitated by the BP. In addition, the marketing boards conduct SFI BMP surveys and reports on a random selection of private wood lots on an annual basis.
Means of Verification	Supplier contracts and assertions List of applicable laws and regulations PEFC wood procurement processes Company risk assessments BP's annual supplier evaluations BP's purchases wood risk assessment BMP manuals NB SIC BMP survey and reports (private woodlots) NB private woodlot silviculture program 2018-2019 NB private woodlot silviculture funding agreement Government reports Global Forest Watch: https://databasin.org/galleries/0267510a7beb4142a55857290b8f922a#expand=152259%2C152261 2019 State of Canada's Forest annual report: https://d1ied5g1xfgpx8.cloudfront.net/pdfs/40084.pdf 2030 Agenda for Sustainable Development: https://sustainabledevelopment.un.org/post2015/transformingourworld
Evidence Reviewed	All means of verification reviewed
Risk Rating	☑ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	N/A

	Indicator
2.2.4	The Biomass Producer has implemented appropriate control systems and procedures to ensure that biodiversity is protected (CPET S5b).
Finding	The supply base is traceable back to the defined supply base (Indicator 1.1.2). **About 70-80%** of the BP's feedstock is sustainable forest management (SFM) certified and acquired through the PEFC chain of custody (COC) system. SFM certificate holders are required to maintain forest management and harvest plans consistent with best management practices (BMP). Furthermore, certificate holders undergo annual 3rd party audits to ensure that practices are consistent with SFM standards. **The remaining ~20-30%** is uncertified feedstock from managed forests; most from private land (~20%) in New Brunswick (NB); a small percentage originates from FSC certified sawmills (<5%) and private woodlots (~2%) in South Eastern Quebec (QC) and some residuals are traced back to Nova Scotia (NS) forests (<1%). Following Canada's ratification to the Convention on Biological Diversity in 1992, the Federal, Provincial and Territorial Working Group on Biodiversity was established. The group works to achieve the goals and objectives of the United Nations Convention on Biological Diversity. Currently, nineteen targets are being pursued at a national level for the conservation of biodiversity. Some of the targets applicable to this indicator are: a) create more protective areas, b) ensure species are secure and species listed on SARA have effective recovery strategies and management plans, c) conserve and enhance wetlands and ecosystem services, d) understand adaptations of ecological systems to climate change, e) continue progress on sustainable management of Canada's forests, f) identify and intervene invasive species, and g) enhance science-based biodiversity, increase accessibility, integrate into the school system and gain public interest. National reports summarizing progress are submitted to the United Nations Convention on Biological Diversity (*https://biodivcanada.chm-cbd.net/?lang=En&n=DABC84B3-1*). Forest management in Canada is based on nationally recognized standards for the long term protection and development of the forest. Canada's forest laws are some of the strictest in the world and are based on sustainable forest management principles, scientific research and analysis, and developed with public consultation (*https://www.nrcan.gc.ca/forests/canada/laws/17497*). Federal and provincial governments both have a responsibility in managing biodiversity; strategies are implemented in each province. **New Brunswick** In NB, regional marketing boards represent private woodlot owners. Marketing boards distribute BMP guides to private woodlot owners and contractors (*Best Management Practices: A Practical Guide to BMP's in New Brunswick's Private Woodlots*). The guide is supported by the SFI Implementation Committee in NB and lays out similar objectives to the SFI FM standard, including objectives for consideration of biodiversity. The marketing boards offer assistance with forest management plans and mapping, as well as SFI logger training. Furthermore, the marketing boards' complete annual audits on a selection of private woodlots. Private woodlots must have operating plans to be considered for silviculture funding. An agreement between the marketing board and the woodlot owner/contractor specifies that all silviculture work must be completed in accordance with local standard and practices of the Department of Natural Resources (DNR). The *New Brunswick Private Woodlot Silviculture manual* lists the rules and regulations governing activities on private woodlots, and includes requirements for BMPs on habitat and biodiversity to be presented in operating plans. Once silviculture work is completed and approved by either the marketing board or DNR, the

	contractor is paid the pre-approved rate per hectare. Computer-based modelling software is used to create maps of forest inventory data and simulate the growth of different forest communities in NB. These maps show ecoregions and species present, and include areas which are considered more vulnerable, including sites of endangered species, waterways, deer wintering areas and old-spruce forests. These maps are used in management plans to ensure biodiversity of Crown forest in New Brunswick is maintained (*https://www2.gnb.ca/content/gnb/en/services/services_renderer.200621.html*). Protected Natural Areas (PNA) in New Brunswick are mapped, and sites of high or unique ecological, historical, cultural or scenic value are preserved (*https://nbdnr.maps.arcgis.com/apps/webappviewer/index.html?id=ceb3caf9aba34466bbb0bfa0bb0c3ed5&locale=en)*. 70-80% of the BPs feedstock is SFM certified. SFM standards have requirements for the protection and conservation of biodiversity. The BP's PEFC feedstock procurement procedures and documents (SFM certificates, quarterly declarations, credit account, etc.) provide assurance that feedstock is originating from certified lands. **Nova Scotia** The Natural Resources strategy (*The Path We Share, A Natural Resources Strategy for Nova Scotia 2011-2020*) set several goals in regards to biodiversity in the province: a) establish clear & effective leadership and governance for biodiversity (Goal 4), b) increase and share knowledge about biodiversity (Goal 5), c) maintain & restore healthy wildlife populations, ecosystems and processes (Goal 6), and d) engage Nova Scotians in the province's biodiversity. The NS Biodiversity Council, established in 2018, assisted with the creation of new legislation that enables the province of NS to improve conservation and sustainability of wild species and ecosystems. The NS Code of Forest Practice guidebook states that forest management will be designed and conducted in a manner that maintains and enhances the quality of air, water, and soil. The Code is mandatory on Crown lands and recommended for application on private lands. The primary ecological goals addressed in the guidebook include biodiversity conservation and ecosystem productivity and resilience. The *Watercourse and Wildlife Habitat Protection Regulations* require that both Crown and private forest lands leave buffer strips along watercourses, legacy trees in clumps, and coarse woody debris in all types of forest harvesting and management activities. **Quebec** The *Sustainable Forest Development Act* is used as a guideline when constructing forest management plans in QC. Crown lands are managed by the Minister of Natural Resources (MRN). In QC, 92% of forests are considered public lands, and as of 2013, 90% of productive public forests are certified through recognized standards (PEFC, FSC, and SFI). Furthermore, the Minister of Environment may designate a forest as an exceptional forest ecosystem at any time, and all forest development activities would be prohibited in these areas. The majority of secondary feedstock originating from QC is sourced from FSC FM certified lands. FSC FM standards have requirements for the conservation of biodiversity, and the forest lands are 3rd party audited. The QC BMP manual provides guidelines for conservation and protection of forest biodiversity (Saines Pratiques D'Intervention en Foret Privee, Guide Terrain, 4E, 2016). **National Assessment** The *FSC National Risk Assessment in Canada* (2020) [FSC NRA] has been utilized to further assess the risk for HCVs for each of the three WWF ecoregions identified in the supply base. The assessment uses species at risk identified by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) – a panel of expert Canadian scientists. COSEWIC makes recommendations to the Minister of Environment, who creates listing plans

and evaluates whether the species is added to the *Species at Risk Act* (SARA). Recovery plans are created for species added to SARA.

Three WWF ecoregions have been identified and mapped for the supply base, the Eastern Canadian Forest, the New England Acadian Forest, and the Gulf of St. Lawrence Lowland Forest. The *FSC National Risk Assessment for Canada* [FSC NRA] (2020) has been utilized to further assess the risk for HCV in the supply base. There are 6 HCV features identified in the FSC NRA:

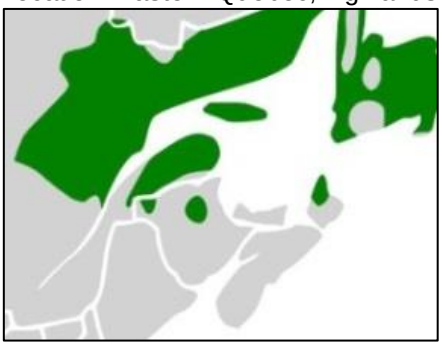
- HCV 1: Species Diversity
- HCV 2: Landscape-level ecosystems and mosaics
- HCV 3: Ecosystems and Habitat
- HCV 4: Critical Ecosystem Services
- HCV 5: Community Needs
- HCV 6: Cultural values

HCV 1, species diversity, is evaluated based on species identified by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) – a panel of expert Canadian scientists, as a basis for the determination of risk. COSEWIC makes recommendations to the Minister of Environment, and the minister will create listing plans and evaluate whether the species is added to the *Species at Risk Act* (SARA). Recovery plans are created for species added to SARA.

In the FSC NRA (2020), HCV 1 (Species Diversity) was identified as having specified risk for two of the three ecoregions in the supply base. The Eastern Canadian Forests and the New England Acadian Forests were designated as having specified risk, whereas the Gulf of St. Lawrence Lowland Forests were designated low risk.

Eastern Canadian Forest

Location: Eastern Quebec, highlands of New Brunswick and Cape Breton, Newfoundland



Of the 33 forested ecoregions in Canada, the *WWF Conservation Status Index* lists the Eastern Canadian Forest as critical/endangered and is shown in the map above.

The FSC NRA (2020) identifies this ecoregion at a low risk for the following HCV indicators for this ecoregion:

- HCV 3: Ecosystems and Habitat
- HCV 4: Critical Ecosystem Services
- HCV 5: Community Needs
- HCV 6 Cultural values

The assessment identifies the Eastern Canadian Forest as a specified risk for HCV 1 and HCV 2 (HCV 2 will not be discussed in this indicator). The risk assessment had two approaches for identifying HCV 1 forests, and included concentrations of SAR critical habitat and critical habitat for SAR of special significance. The Species Richness Ratio for the Eastern Canadian Forest is 4.57.

For HCV 1, areas within each forested ecoregion where critical habitat was identified in recovery strategies (under the federal Species at Risk Act) were used in determining areas of specified risk. In the Eastern Canadian Forest, critical habitat for the American Marten's Newfoundland population was designated as specified risk. Since the biomass producer does not procure fibre in the Newfoundland region where this population exists, it has been

designated as low risk.

The BP designates the Eastern Canadian Forest as low risk for this indicator because:

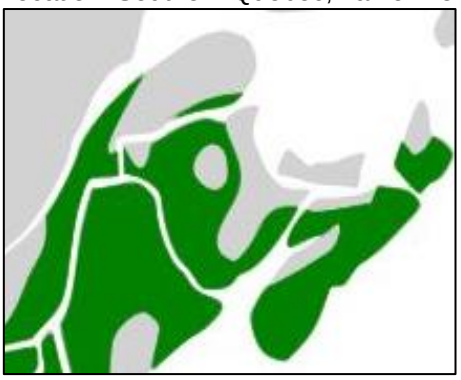
- Most of this ecoregion is outside of the defined supply base (Northern Quebec and Newfoundland). Eastern Canadian Forests within the defined supply base are in NB and Cape Breton Highlands, NS, which are outside of the procurement area for primary and secondary fibre suppliers.

- Most Eastern Canadian Forest regions in the supply base are designated as protected areas (In Gaspe, QC & Cape Breton Highlands, NS) or are located on NB Crown lands. HCV sites are avoided during harvests under current management practice recommendations included in BMP manuals and guidelines. Most Crown land is SFM certified, and forest management plans are 3rd party audited to recognized forest management standards.

- The WWF has mapped and identified areas of high conservation value, and the FSC NRA (2020) has evaluated risks associated with these and have identified areas with specified risk. The FSC NRA (2020) designated a specified risk for HCV 1 only for the Newfoundland population of the American Marten. This population is not located within the biomass producer's defined supply base.

New England Acadian Forest

Location: Southern Quebec, half of New Brunswick and most of Nova Scotia



The WWF Conservation Status Index lists the New England Acadian Forest as critical/endangered and a map is shown above. The FSC NRA (2020) designates this ecoregion at a low risk for the following HCV indicators:

- HCV 2: Landscape-level ecosystems and mosaics
- HCV 3. Ecosystems and habitats
- HCV 4: Critical ecosystem services
- HCV 5: Community needs
- HCV 6: Cultural values

The assessment designates a specified risk for HCV 1 (Species Diversity) for the critical habitat of 4 species at risk: 1) Rainbow Smelt (Lake Utopia small-bodied population), 2) Furbish's Lousewort, 3) Blanding's Turtle, and 4) Van Brunt's Jacob's-ladder. Critical habitat for these species is located within some regions of the New England Acadian Forest.

1) Rainbow Smelt – A recovery strategy was proposed for Lake Utopia's Rainbow Smelt in 2016. Critical habitat for this species has been identified as Lake Utopia in Magaguadavic River watershed in Charlotte County, New Brunswick and included in its habitat are the tributaries: Smelt Brook, Unnamed Brook and Second Brook. The provincial government (NB DELG on private land and NB DNR on Crown land) regulates any harvesting that takes place within a 30m buffer zone along watercourses to ensure that water quality and aquatic habitat are not compromised (Recovery Strategy for Lake Utopia Rainbow Smelt, 2016).

2) Furbish's Lousewort – The 2010 Furbish's Lousewort recovery strategy includes

maintaining individual populations along river segments where the species is known to occur between Grand Falls and Perth Andover. Loss of buffer trees along river banks and around inland sites that reduce shade impact this riparian floral species. The provincial government regulates any harvesting within a 30 m buffer zone along watercourses to ensure that riparian buffers are not altered.

3) Blanding's Turtle – The 2016 Blanding's Turtle recovery plan and the 2019 action plan identify the distribution of the Blanding's Turtle population and the measures to protect critical habitat. Critical habitat occurs in both a federal and provincial protected areas and on private property. The action plan includes building on current stewardship and landowner initiatives. Part of the plan is to work closely with local forest industries to protect and restore habitat and foster public involvement in the recovery. The provincial government regulates any harvesting within a 30 m buffer zone along watercourses to ensure that riparian buffers are not altered.

4) Van Brunt's Jacob's-ladder – The 2012 recovery strategy for Van Brunt's Jacob's-ladder specifies that the species occur in Dipper Harbour Creek in Saint John, Trout Lake in Charlotte, and Hoyt in Sunbury, New Brunswick. Drainage from forestry operations are of a moderate level of concern. The recovery strategy includes mitigation of threats through best management practices for landowners and land managers.

Each species is listed in Schedule 1 of the Species at Risk Act. The 4 species, the Rainbow Smelt, Furbish's Lousewort, the Blanding's Turtle, and Van Brunt's Jacob's-ladder are within the supply base of this evaluation, however, feedstock is not being sourced from areas where critical habitat has been established and identified in each of the species recovery strategies. Primary and secondary feedstock has been sourced to the forest of origin and current sources are not of concern to have originated from these areas.

The BP identifies the New England Acadian Forest at a low risk for this indicator because:

- The WWF has mapped and identified areas of high conservation value, and the FSC NRA (2020) has evaluated risks associated with critical habitat for species at risk in the New England Acadian Forest ecoregion. The assessment designated a specified risk for critical habitat of 4 species at risk. Each of these 4 species has an action plan and/or recovery strategy in place. Roundwood and fibre are not being sourced from areas where these critical habitats exist.
- Best management practices are in place in areas where roundwood and fibre are sourced

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Gulf of St. Lawrence Lowland Forest

Location: Prince Edward Island, parts of New Brunswick and western coast of Nova Scotia

The WWF Conservation Status Index lists the Gulf of St. Lawrence Lowland Forest as critical/endangered and it is mapped as shown above. The FSC NRA (2020) identifies this ecoregion at a low risk for the following HCV indicators:

- HCV 1: SAR Critical Habitat

- HCV 2: Landscape-level ecosystems and mosaics
- HCV 3. Ecosystems and habitats
- HCV 4: Critical ecosystem services
- HCV 5: Community needs
- HCV 6: Cultural values

The BP identifies the Gulf of St. Lawrence Lowland Forest at a low risk for this indicator because:

- The WWF has mapped and identified areas of high conservation value, and the FSC NRA (2020) has given a low risk rating for all of the HCV indicators
- Best management practices are in place in areas where roundwood and fibre are sourced

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Transportation documents, such as transportation certificates (which contain PIDs), scale tickets, and bills of lading are effective means of tracing round wood back to the forest source and sawmill residuals back to the sawmill. The BP's annual internal audit ensures that transportation documents are properly documented and stored; they are compared to scale reports for the same period to ensure that all tickets have been received and all fibre is accounted for. The internal audit also verifies the validity of forest management certificates.

Supplier contracts require an adherence to all applicable regional, provincial and federal legislation. Furthermore, prior to bringing any feedstock onto the site, all suppliers are required to sign a supplier's assertion that includes the following:

The supplier confirms that round wood and wood fibre don't originate from unacceptable or controversial sources, which include sources that are:

1. *Not complying with local, national or international legislation, in particular:*
    a. *forestry operations and harvesting, including biodiversity conservation and conversion of forest to other use*
    b. *management of areas with designated high environmental and cultural values, protected and endangered species, including requirements of CITES,*
    c. *health and labour issues relating to forest workers, indigenous peoples' property, tenure and use rights, third parties' property, tenure and use rights,*
    d. *payment of taxes and royalties related to timber harvesting are complete and up to date,*
2. *Not complying with legislation of the country of harvest relating to trade and customs, in so far as the forest sector is concerned,*
3. *Utilizing genetically modified forest based organisms,*
4. *Converting forest to other vegetation type, including conversion of primary forests to forest plantations. Where forest plantations are defined as forests of exotic species that are under intensive stand management, are fast growing and subject to short rotations (I.e. Poplar, acacia, or eucalyptus plantations)*

On an annual basis, the BP completes supplier evaluations on 25% of secondary suppliers. The supplier audit consists of a site visit to review and collect documentation on forest sources (location of the stump) to ensure that feedstock originates from within the supply base. The audit also helps to identify how certified feedstock is traced back to the forest management unit. This control measure provides assurance to the BP that feedstock originates from within the defined supply base of this evaluation.

The BP has implemented a purchase wood risk assessment for all round wood purchases. Round wood purchases are evaluated annually; and depending on the associated risk, are either assessed via a desktop forest practice compliance review or with a site visit and field inspection facilitated by the BP. In addition to the BP's audits, the marketing boards conduct SFI BMP surveys and report on a random selection of private wood lots on an annual basis. Source forests are compared to critical habitat areas to ensure that harvests aren't located in these areas. As part of the BP's due diligence system, risk assessments have been completed for each of the provinces in the supply base.

Means of Verification	Supplier contracts and assertions List of applicable laws and regulations Company risk assessments BP's annual supplier evaluations BP's Purchase wood risk assessment NB SIC BMP survey and reports (private woodlots) BMP manuals Map of forest sources Critical habitat maps NB Private Woodlot Silviculture Program 2018-2019 NB private woodlot silviculture funding agreement New Brunswick government forestry reports: https://www2.gnb.ca/content/gnb/en/departments/erd/natural_resources/content/ForestsCrownLands.html Nova Scotia government forestry reports: https://novascotia.ca/natr/forestry/ Quebec government forestry reports: https://mffp.gouv.qc.ca/the-forests/forests-publications/?lang=en FSC National Risk Assessment: https://ca.fsc.org/en-ca/standards/national-risk-assessment-01
Evidence Reviewed	All means of verification reviewed
Risk Rating	☑ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	N/A

	Indicator
2.2.5	The Biomass Producer has implemented appropriate control systems and procedures for verifying that the process of residue removal minimises harm to ecosystems.
Finding	The supply base is traceable back to the defined supply base (Indicator 1.1.2). **About 70-80%** of the BP's feedstock is forest management (FM) certified and acquired through the PEFC chain of custody (COC) system. SFM certificate holders are required to maintain forest management and harvest plans consistent with best management practices (BMP), which include measures for protecting ecosystems, soil and water quality. **The remaining ~20-30%** is uncertified feedstock from managed forests; most from private land (~20%) in New Brunswick (NB); a small percentage originates from FSC certified sawmills (<5%) and private woodlots (~2%) in South Eastern Quebec (QC) and some residuals are traced back to Nova Scotia (NS) forests (<1%). **New Brunswick** The *2009 Biodiversity Strategy* is a comprehensive plan which aims to conserve genetic, species and ecosystem diversity and the sustainable use and development of biological resources. In NB, regional marketing boards represent private woodlot owners. Marketing boards distribute BMP guides to private woodlot owners and contractors (*Best Management Practices: A Practical Guide to BMP's in New Brunswick's Private Woodlots*). The guide is

supported by the NB SFI Implementation Committee. The BMP guide provides guidance for managing harvest debris (slash), tree tops, and coarse woody debris (fallen dead wood). Slash and tree tops (crown & fine branches from canopy) hold many of the nutrients for the soil, while dead wood is critical habitat for many species. The marketing boards offer assistance with forest management plans and mapping, and will often offer SFI logger training. Furthermore, the marketing boards' complete annual audits and reports on a selection of private woodlots.

Private woodlots must have operating plans for consideration of silviculture funding. An agreement between the marketing board and the woodlot owner/contractor specifies that all silviculture work must be completed in accordance with local standards and practices of the Department of Natural Resources (DNR). The *NB Private Woodlot Silviculture manual* lists the rules and regulations governing activities on private woodlots. Once silviculture work is completed and approved by either the marketing board or DNR, the contractor is paid the pre-approved rate per hectare.

70-80% of feedstock is SFM certified. The majority of this originates from certified Crown forests and freehold lands in NB. SFM standards have requirements to manage the use of harvest residue (eg. Slash, limbs, tops) so that environmental factors such as organic and nutrient value to future forests are considered. The BP's PEFC feedstock procurement procedures and documents (SFM certificates, quarterly declarations, credit account, etc.) provide assurance that feedstock is originating from certified lands. Furthermore, DNR recognizes that biomass (tree tops, branches, foliage, non-merchantable woody stems, etc.) is an important source of nutrients for forest development and growth. The NB biomass policy identifies procedures to assess impacts of harvesting on sustainability and forest growth and provides guidelines in selecting eligible areas for biomass harvesting. Biomass removal is limited to forest stands within harvest blocks of approved forest management plans and must minimize soil disturbance (compaction, rutting & erosion) and not remove forest floor (Litter layer, soil surface, stumps and root systems).

The Crown forest management system in NB is established under the *Crown Lands and Forest Act* and is monitored by DNR and citizens of NB. The government sets objectives and standards for management of the lands and Licensees are responsible for achieving those objectives. Under the Act, the Minister of Natural Resources evaluates Crown forest management performance every five years. The evaluation results are used to determine whether the Forest Management Agreement is extended or terminated

Nova Scotia
In NS, the current extent of whole-tree harvesting is low. The Department of Lands and Forestry have the means to classify ecological conditions and assess specific nutrient status through the provincial forest ecosystem classification (FEC) system and the nutrient budget model for NS. Research has shown that whole-tree harvesting (aside from commercial thinning or partial cuts) is detrimental to the productivity on forest sites. Regulatory amendments are being proposed to restrict whole-tree and full-tree harvesting in NS.

Nova Scotia's Code of Forest Practice states that forest management will be designed and conducted in a manner that maintains and enhances the quality of air, water, and soil. BMP's are provided to private woodlot owners through regional organizations who assist private woodlot owners in their forests' management. The manual suggests consulting the Forest Ecosystem Classification guide to determine soil characteristics of the site when considering harvesting slash, limbs and tops.

The *Wildlife Habitat and Protection Regulations*, made under section 40 of the Forests act have several requirements including: 1) legacy trees and habitat structure, which includes specific regulations in regards to number of trees, proportion of species, average height and diameter, and clump size, 2) special management zones for watercourses (> 50 cm wide), and 3) protection of watercourse (< 50 cm wide). BMPs are provided to private woodlot owners through regional organizations who assist private woodlot owners in their forests' management.

Quebec

	The *Sustainable Forest Development Act* is used as a guideline when constructing forest management plans in QC. Crown lands are managed by the Minister of Natural Resources (MRN). 92% of forests are considered public lands, and as of 2013, 90% of productive public forests are certified through recognized standards (PEFC, FSC, and SFI). Furthermore, the Minister of Environment may designate a forest as an exceptional forest ecosystem at any time, and all forest development activities would be prohibited in these areas. The majority of secondary feedstock originating from QC is sourced from FSC FM certified lands. FSC FM standards have requirements for identifying BMPs for nutrient loss prevention from slash dispersal, for delimbing-at-stump, and for slash management (burning, piling, re-distribution). FSC-certified forests are 3rd party audited annually. The QC BMP manual provides guidelines for conservation and protection from nutrient loss (Saines Pratiques D'Intervention en Foret Privee, Guide Terrain, 4E, 2016). Supplier contracts and assertions provide assurance that suppliers are adhering local and national legislations and regulations. On an annual basis, the BP completes supplier evaluations on 25% of secondary suppliers. The supplier audit consists of a site visit to review and collect documentation on forest sources (location of the stump) to ensure that feedstock originates from within the supply base, and to identify how certified feedstock is traced back to the forest management unit. This control measure provides assurance to the BP that feedstock originates from within the defined supply base of the SBE. The BP has implemented a purchase wood risk assessment for all round wood purchases. Round wood purchases are evaluated annually; and depending on the associated risk, may be assessed based on forest practice compliance or have site visits and field inspections facilitated by the BP. In addition, the marketing boards conduct SFI BMP surveys and reports on a random selection of private wood lots on an annual basis.
Means of Verification	Supplier contracts and assertions Wood procurement processes List of applicable laws and regulations Company risk assessments BP's purchase wood risk assessment BMP manuals PEFC audit SFM Standards Provincial &standards BMP manuals NB SIC BMP survey and reports (private woodlots) Crown and third party certification audit NB Forest Biomass Policy: https://www2.gnb.ca/content/gnb/en/services/services_renderer.201174.Crown_Lands_-_Harvest_Forest_Biomass_.html NS Forestry Laws and Policy: https://novascotia.ca/natr/forestry/laws/ QC Sustainable Forest Development Act: http://legisquebec.gouv.qc.ca/en/ShowDoc/cs/A-18.1
Evidence Reviewed	All means of verification reviewed
Risk Rating	☑ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	N/A

	Indicator
2.2.6	The Biomass Producer has implemented appropriate control systems and procedures to verify that negative impacts on ground water, surface water and water downstream from forest management are minimised (CPET S5b).
Finding	The *Clean Water Act*, established in 1989, includes important aspects of legislation related to protecting quality and quantity of water in rivers, streams and lakes, diversity of aquatic habitats and species, and drinking water supplies. Forestry operations are bound by this national legislation, which are enforced by provincial governments. Of the 33 forested ecoregions in Canada, the *WWF Conservation Status Index* lists the three ecoregions within the supply base as critical/endangered (https://www.worldwildlife.org/ecoregions/na0605). The *FSC NRA* (2020) assesses the risk of potential threats to the forests and other areas with high conservation value (HCV). The FSC NRA divides HCVs into 6 indicators: ○ HCV 1: Species diversity ○ HCV 2: Landscape-level ecosystems and mosaics ○ HCV 3: Ecosystems and habitats ○ HCV 4: Critical ecosystem services ○ HCV 5: Community needs ○ HCV 6: Cultural values HCV 4 (Critical Ecosystem Services) includes the protection of water catchments and control of erosion of vulnerable soils and slopes (protection from flooding & erosion, and clean water catchments). The assessment identified threats that may cause flooding or damage to clean water catchments. The threats include physical damage to waterbodies as a result of improper management practices causing sediment erosion and soil compaction and indirect contamination of waterbodies as a result of surface runoff or subsurface leakage. HCV 5 (Community needs) includes the evaluation of the basic necessities of local communities or indigenous peoples, and includes water. Water sources for irrigation and sources for community water as well as areas of subsistence. The threats are the same as in HCV4, physical damage to watercourses from improper management and indirect contamination. The FSC NRA (2020) designated a low risk for HCV 4 an HCV 5 for areas located within the defined supply base of New Brunswick, Nova Scotia and Quebec. **New Brunswick** Regulations protecting surface water under the *Clean Water Act* include the *Watershed Protected Areas Designation Order*, *Water Classification Regulation* and the *Watercourse and Wetland Alteration Regulation*. Most Crown forests are SFM certified and are 3rd party audited annually to ensure that best management practices (BMP) are implemented on harvest sites. Regional marketing boards supply BMP manuals and complete annual BMP audits on a selection of private woodlots. These data are summarized in an annual report. Adherence to the *Clean Water Act* and *Watercourse Buffer Zone guidelines* is also required in NB forests, and these are enforced by the provincial government. **Nova Scotia** In NS, the provincial government works with stakeholders and municipalities to protect surface waters through watershed management planning and the use of best management practices. In areas where municipalities rely on surface water sources for drinking water, the development of *Source Water Protection Plans* is required through Nova Scotia Environment. The plans serve as a guide to protect surface waters for aquatic life habitat. Documents on BMPs and forest planning in municipal drinking water supply areas in Nova Scotia have been created for guidance. There is further protection

	under the *Water Resources Protection Act*. *Nova Scotia's Code of Forest Practice* states that forest management will be designed and conducted in a manner that maintains and enhances the quality of air, water, and soil. The *Watercourse and Wildlife Habitat Protection regulations* require all forestlands to have buffer strips left along watercourses, legacy trees left in clumps, and coarse woody debris left in all types of forest harvesting activities. BMPs are provided to private woodlot owners through regional organizations who assist with their forests' management. **Quebec** Water quality in QC is protected through recently tightened standards, the *Regulation respecting the quality of drinking water* and *Regulation respecting groundwater catchment*. The *Sustainable Forest Development Act* covers environmental impacts to watercourses and groundwater on public lands, particularly buffer zones and breeding sites (FSC NRA 2020). All watercourses in QC are protected through the protection policy for lakeshores, riverbanks, littoral zones and floodplains under the *Environmental Policy Act*. Supplier contracts include a clause that require adherence to applicable legislation. Prior to the delivery of feedstock, suppliers must sign an assertion declaring that all feedstock originates from within the BP's defined supply base. On an annual basis, the BP completes supplier evaluations on 25% of secondary suppliers. The supplier audit consists of a site visit to review and collect documentation on forest sources (location of the stump) to ensure that feedstock originates from within the supply base, and to identify how certified feedstock is traced back to the forest management unit. This control measure provides assurance to the BP that feedstock originates from within the defined supply base of the SBE. The BP has implemented a purchase wood risk assessment for all round wood purchases. Round wood purchases are evaluated annually; and depending on the associated risk, may be assessed based on forest practice compliance or have site visits and field inspections facilitated by the BP. In addition, the marketing boards conduct SFI BMP surveys and reports on a random selection of private wood lots on an annual basis. As part of the BP's due diligence system, risk assessments have been completed for each of the 3 source provinces.
Means of Verification	Supplier contracts and assertions List of applicable laws and regulations NBSIC surveys BP's annual supplier evaluations BP's purchase wood risk assessment BMP manuals FSC National Risk Assessment: https://ca.fsc.org/en-ca/standards/national-risk-assessment-01
Evidence Reviewed	All means of verification reviewed
Risk Rating	☑ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	N/A

	Indicator
2.2.7	The Biomass Producer has implemented appropriate control systems and procedures for verifying that air quality is not adversely affected by forest management activities.
Finding	Equipment used to harvest and generate biomass is regularly inspected and maintained. This includes the use of modern engine designs and the changing of air filters at specified periods. The *Clean Air Act* is the legal authority for controlling sources of air emissions in each province. Each province (NB, NS, and QC) carry out their own air quality monitoring programs. The data are compiled into a federal air quality health index and data are used to ensure compliance with the *Clean Air Act*. **New Brunswick** The provincial government continuously monitor and report on a variety of air pollutants at over 100 locations throughout the province. (*https://www2.gnb.ca/content/gnb/en/departments/elg/environment/content/air_quality/air_quality_monitoring.html*) All industries are required to take steps to cut emissions when levels begin to approach provincial standards and/or national guidelines. Every source of emissions in the province must obtain an air quality approval from the provincial government. The approval specifies operating conditions and emission limits. It is against the law to violate the terms of an approval. Current air quality operating approvals can be viewed online (*https://www2.gnb.ca/content/gnb/en/departments/elg/environment/content/air_quality/clean_air/approvals.html*) **Nova Scotia** The NS provincial government has air monitoring stations set up throughout the province. The ambient air monitoring stations measure air quality from many sources including power plants, mills, vehicles, and natural sources. These are compared to maximum permissible ground level concentrations in the *Nova Scotia Air Quality Regulations* and the *Canadian Ambient Air Quality Standards*. The monitoring stations monitor a variety of pollutants including: ground-level ozone (O_3), fine particulate matter ($PM_{2.5}$), carbon monoxide (CO), sulphur dioxide (SO_2), Total reduced sulphur (TRS), and nitrogen oxides & dioxide (NO_x, NO, NO_2). (*https://novascotia.ca/nse/airdata/*) Nova Scotia Air Zone Reports are accessible online and are provided through the Air Quality Management System, which is implemented across Canada though the Canadian Council of Ministers of the Environment *(https://novascotia.ca/nse/air/air-zone-reports.asp*). **Quebec** Data from monitoring stations throughout Quebec are compared to the Quebec Air Quality Standards and criteria. (http://www.iqa.mddelcc.gouv.qc.ca/contenu/index_en.asp) Emitters must report their emission in accordance with the regulation respecting mandatory reporting of certain emission of contaminants into the atmosphere under the Environment Quality Act. (http://www.environnement.gouv.qc.ca/air/declar_contaminants/index-en.htm) Supplier contracts include a clause that require adherence to applicable legislation. Prior to the delivery of feedstock to the BP's wood pellet plant, suppliers must sign an assertion declaring that all feedstock originates from within the BP's defined supply base.

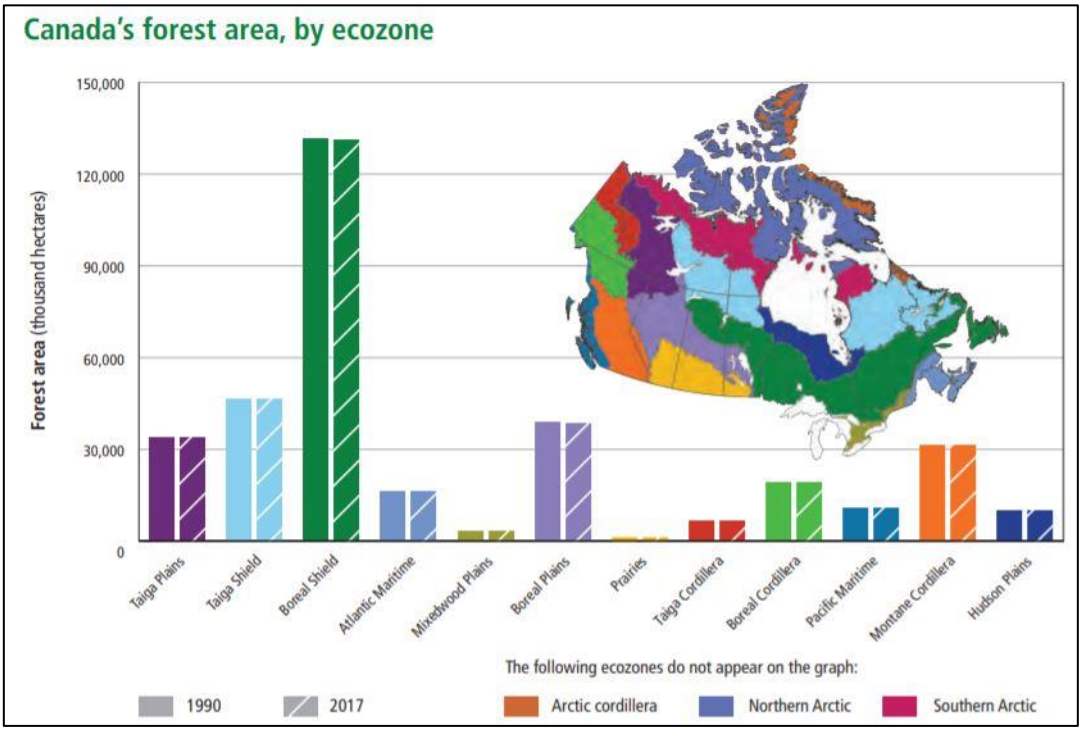
Means of Verification	Supplier contracts and assertions Provincial and federal government reports List of applicable laws and regulations New Brunswick Air Quality Monitoring: https://www2.gnb.ca/content/gnb/en/departments/elg/environment/content/air_quality/air_quality_monitoring.html Nova Scotia Air Quality Monitoring: https://novascotia.ca/nse/airdata/ Quebec Air Quality Monitoring: http://www.iqa.mddelcc.gouv.qc.ca/contenu/index_en.asp)
Evidence Reviewed	All means of verification reviewed
Risk Rating	☑ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	N/A

	Indicator
2.2.8	The Biomass Producer has implemented appropriate control systems and procedures for verifying that there is controlled and appropriate use of chemicals, and that Integrated Pest Management (IPM) is implemented wherever possible in forest management activities (CPET S5c).
Finding	The supply base is traceable back to the defined supply base (Indicator 1.1.2). **About 70-80%** of the BP's feedstock is forest management (FM) certified and acquired through the PEFC chain of custody (COC) system. SFM certificate holders are required to maintain forest management and harvest plans consistent with best management practices (BMP), which include measures for protecting forest health and productivity. This includes the protection from pests and diseases. SFM standards have performance measures in place requiring participants to minimize the chemical use of pesticides and to use integrated pest management (IPM) where possible. **The remaining ~20-30%** is uncertified feedstock from managed forests; most from private land (~20%) in New Brunswick (NB); a small percentage originates from FSC certified sawmills (<5%) and private woodlots (~2%) in South Eastern Quebec (QC) and some residuals are traced back to Nova Scotia (NS) forests (<1%). Insects are one of the most important disturbance agents in Canada's forests and outbreaks of some key species, like the spruce budworm and the forest tent caterpillar are cyclical, whereas others like the bark beetle erupt under certain forest and climatic conditions (NRCAN, 2019). (https://www.nrcan.gc.ca/our-natural-resources/forests-forestry/wildland-fires-insects-disturban/forest-pest-management/13361) To maintain the health of Canada's forests, provincial governments take on an integrated pest management (IPM) approach. Interventions are carried out based on knowledge of the short-term and long-term impacts and involve targeting both the area and pest in question. Forest ownership determines who is responsible for pest management, whether it be federal, provincial, municipal or private. The Canadian Forest Service (CFS) provides a scientific and technological support on forest pest matters to all jurisdictions. (https://www.nrcan.gc.ca/forests/fire-insects-disturbances/pest-management/13361) Pesticides are regulated by the federal, provincial and municipal governments. All pesticides must be registered by the Pest Management Regulatory Agency (PMRA) of Health Canada

	through the *Pest Control Products (PCP) Act*. Once registered, it receives a PCP Act Registration Number. The province regulates the sale, use, storage and disposal of pesticides. Vendors or applicators of restricted or commercial class pesticides may be required to obtain certification. In NB, the *Pesticides Control Act* and regulations are administered by the Department of Environment and apply to all forested lands. Provincial legislation ensures that pesticides are used, stored and disposed of to minimize impact on non-target species, human health and environment. For private woodlots, clause 12, 13, and 14 of the silviculture landowner agreement discuss compliance with DNR. The NB silviculture manual also specifies requirements for herbicide application and adhering to the *Pesticides Control Act*. (https://www2.gnb.ca/content/gnb/en/departments/erd/natural_resources/content/ForestsCrownLands/content/ForestPests/ForestPestManagement.html) In NS, to apply a commercial or restricted class pesticide, the applicator must hold a valid applicators certificate from the provincial government. Vendors must also hold valid vendors certificate. Approvals are required under the *Activities Designation Regulations* to apply pesticides on any forested land. (https://novascotia.ca/nse/pests/faqs.asp) In QC, the *Pesticides Management Code* governs the storage, sale and use of pesticides. The code requires applicators to obtain permits and certifications for use. The use of pesticides in Quebec forests is relatively limited following the government's commitment with the Forest Protection Strategy which eliminates the use of chemical pesticides in public forests. (http://www.environnement.gouv.qc.ca/pesticides/permis-en/code-gestion-en/aires-forest/index.htm) In general, all pesticides must be registered by Health Canada and any individual using a non-domestic pesticide must hold a Pesticide Applicator Certificate, and in some cases a permit. Supplier contracts include a clause that require adherence to all applicable legislation. Suppliers must also sign an assertion declaring that all feedstock originates from within the BP's defined supply base.
Means of Verification	Supplier contracts and assertions NB silviculture manual Silviculture agreement Pesticide licenses and permits List of applicable laws and regulations
Evidence Reviewed	All means of verification reviewed
Risk Rating	☑ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	N/A

	Indicator
2.2.9	The Biomass Producer has implemented appropriate control systems and procedures for verifying that methods of waste disposal minimise negative impacts on forest ecosystems (CPET S5d).
Finding	The *Environmental Protection Act* provides direction on controlling pollution, managing wastes and reporting releases to the environment. Each province has requirements for the reporting of spills of hazardous substances and environmental contaminants (https://laws-lois.justice.gc.ca/eng/acts/c-15.31/page-14.html#h-34). In NB and QC, all spills must be reported to the provincial government. In NS, authorities must be notified if

	the unauthorized release of contaminants is greater than pre-determined level. Each province has a spill reporting hotline. When spills are reported, the spill response is evaluated and it is determined whether further action/follow-up or fines are required. Supplier contracts include a clause that require adherence to applicable legislation. Suppliers must also sign an assertion declaring that all feedstock originates from within the BP's defined supply base and is legally sourced.
Means of Verification	Supplier contracts and assertions List of applicable laws and regulations
Evidence Reviewed	All means of verification reviewed
Risk Rating	☑ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	N/A

	Indicator
2.3.1	Analysis shows that feedstock harvesting does not exceed the long-term production capacity of the forest, avoids significant negative impacts on forest productivity and ensures long-term economic viability. Harvest levels are justified by inventory and growth data.
Finding	Canada's forested areas have been stable over the last 25 years because of robust laws, management and requirements for reforestation of harvested Crown lands. Canada is a leader in sustainable forest management. Of the 347 million hectares of forest land, 164 million hectares are certified to 3rd party sustainable forest management standards, more than any other country (State of the Forest Report, 2019).  Figure 2.3.1-1 Canada's forest area by ecozone (State of the Forest Report, 2019)

Of the 0.01% of Canada's forest lost to deforestation each year, mining, oil and gas account for 37%, agriculture - 35%, development -18%, hydroelectric - 6% and Forestry - 4% (See Figure 2.3.1-2). The leading cause of disturbance in Canadian forests is from insects, accounting for 4.5% compared to 0.2% for area harvested.

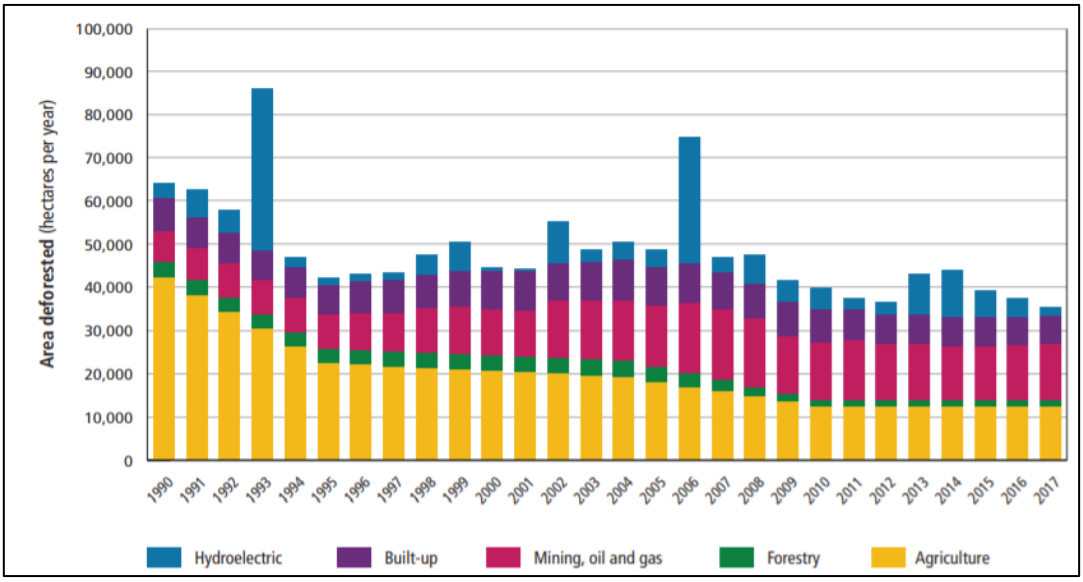


Figure 2.3.1-2: Estimated area (ha) of deforestation in Canada by sector (The State of Canada's Forests Annual Report, 2019)

About 90% of Canada's forests are on Crown lands. Each year, provincial governments specify an annual allowable cut. Harvest volumes are monitored to ensure that they are sustainable over the long term. Canada continues to harvest less than the estimated sustainable wood supply levels, as shown in Figure 2.3.1-3.

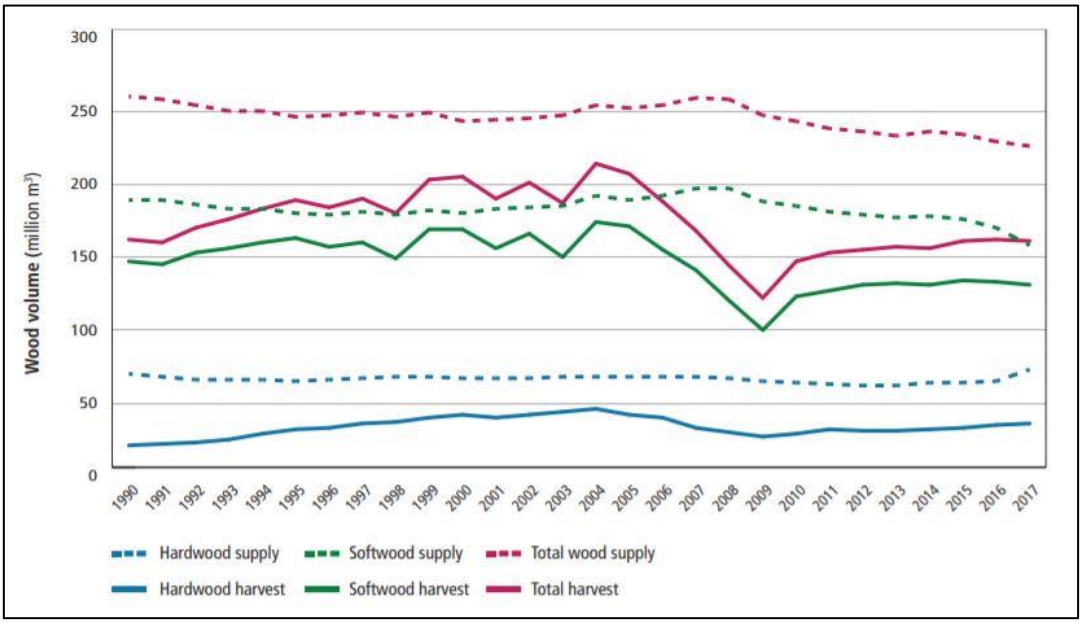


Figure 2.3.1-3: Harvest vs sustainable supply (The State Of Canada's Forests Annual Report, 2019)

In 2017, Canada harvested nearly 155.2 million cubic meters of industrial round wood, well below the estimated sustainable wood supply level of 219.6 million cubic meters. Harvest levels are expected to remain below the sustainable wood supply, given the strong provincial regulatory regimes in place (https://www.nrcan.gc.ca/our-natural-resources/forests-forestry/state-canadas-forests-report/timber-being-harvested-sustainab/indicator-volume-harvested-relative-sustainable-wood-supply/16550) .

New Brunswick
Forest development surveys of Crown forests in New Brunswick (NB) provide quantitative stand data such as volume, density, and age by individual species. In harvesting, a variety of techniques are used (i.e. uneven-aged management) to ensure the long term sustainability of the forest.

Crown land licensees must follow best management practices and not exceed the annual allowable cut (AAC). Licensee-prepared forest management plans and maps show the location, time and general prescription of harvest activity to access the AAC. The plans must also include objectives for setting aside conservation forest and measures to ensure proper regeneration (natural or artificial) after a harvest. Most Crown land is 3rd party certified and undergoes annual audits to SFM standards. These standards have requirements for sustaining harvest levels by monitoring inventory and growth data.

Annual reports submitted to the New Brunswick Department of Natural Resources (NBDNR) summarize the harvest by forest zone and annual volume harvested. After 5 and 10 years, the status of plantations and naturally regenerating areas including species mix, average tree height are re-evaluated. To ensure responsible resource development, NBDNR monitors the progress of Crown harvests on a quarterly cycle. During the 2018-2019 year, 90% of the AAC was harvested (Figure 2.3.1-4)

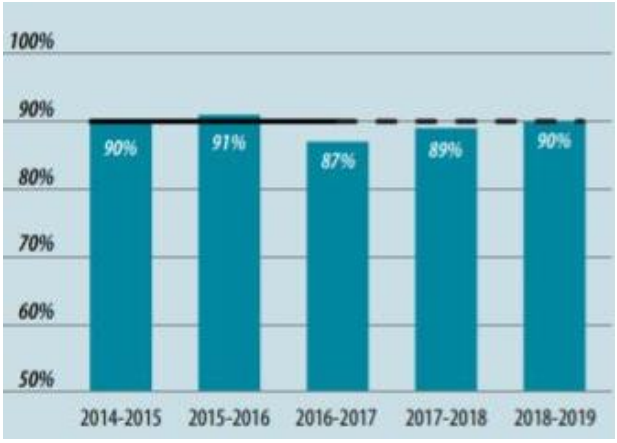


Figure 2.3.1-4: Crown Annual Allowable Cut (NB Energy and Resource Development, Annual Report, 2018-2019)

In NB, regional marketing boards represent private woodlot owners. Marketing boards distribute BMP guides to private woodlot owners and contractors (*Best Management Practices: A Practical Guide to BMP's in New Brunswick's Private Woodlots*). The guide is supported by the SFI Implementation Committee in NB and lays out similar objectives to the SFI FM standard. The marketing boards also offer assistance with forest management plans and mapping, SFI logger training and workshops. Furthermore, the marketing boards' complete annual audits on a selection of private woodlots.

Private woodlot owners seeking silviculture assistance must sign a silviculture Landowner Agreement. The NB silviculture manual specifies requirements for maximizing and improving stand growth and for submission of reports on year 3, 8 and 9 indicating the growth status with recommendations for treatments if required. This performance monitoring is included in the administrative funding provided under the silviculture program.

Nova Scotia
The Nova Scotia Department of Natural Resources (NSDNR) has been collecting data on forest harvest volumes and secondary forest products for 60 years. The forest inventory program collects inventory data via photo interpretation and permanent forest inventory plots. The inventory data helps to define and track volume and growth, and provides a basis for modelling volume, biomass and carbon in the forest. Furthermore, NSDNR's Timber Management Group collects data on silviculture and harvesting via trials, experiments and surveys. The *Spatially Related Forest Resources Information System* shows forest stand descriptions, ownership, wildlife habitat, wetlands information, and natural and protected areas (https://novascotia.ca/natr/forestry/gis/).

	The Registry of Buyers, developed by NSDNR, is a data collection system that provides valuable forest use and management information. Under the *Forest Sustainability Regulations*, all registered buyers who have acquired more than 5,000 cubic meters of wood from private forest land must submit *Wood Acquisition Plans (WAP)* and pay into a silvicultural fund. Harvest volumes are summarized in the annual Registry of Buyers of Primary Forest Products Annual Report. (https://novascotia.ca/natr/forestry/registry/ann_report.asp) One of the principles of *Nova Scotia's Code of Forest Practice* is to ensure that forest management practices are conducted in a way that secures the long term sustainable harvest of forest products. Forest modelling helps to determine if silviculture programs are effective at achieving the growth rates to support long term forecasted harvest levels. The timber harvest guidelines indicate that harvest levels must not exceed the forest's ability to grow wood and silviculture programs must be formulated to ensure this. (https://novascotia.ca/natr/forestry/reports/Code-of-Forest-Practice.pdf) The *Watercourse and Wildlife Habitat Protection regulations* require that on Crown and private lands that buffer strips be left along watercourses, legacy trees be left in clumps, and coarse woody debris be left in all types of forest harvesting and management activities. BMPs are provided to private woodlot owners through regional organizations who are available to assist private woodlot owners with their forests' management. Private woodlot owners are encouraged to adopt BMPs and must conform to the *NS Forest Act*. **Quebec** Québec (QC) has carried out three forest inventory programs over the last 40 years: the network now consists of more than 28,000 ecology observation points. These inventories have permitted the analysis of the forest ecosystems' evolution, their fragility, their productivity and their wood volume. The inventories are an effective means of monitoring forest growth and changes in the forest canopy over time. The *Sustainable Forest Development Act* is used as a guideline when constructing forest management plans in QC. Crown lands are managed by the Minister of Natural Resources (MRN). 92% of forests are considered public lands, and as of 2013, 90% of productive public forests are certified through recognized standards (PEFC, FSC, and SFI). SFM standards require BMPs to be carried out to promote the long term vitality and economic viability of the forest. The QC BMP manual (Saines Pratiques D'Intervention en Foret Privee, Guide Terrain, 4E, 2016) provides guidelines for silviculture treatments to promote long term growth and reduce negative impacts to the forest from harvesting. The majority of secondary feedstock originating from QC is sourced from FSC FM certified lands. FSC FM standards have requirements to maintain and enhance long term economic viability of the forest. This requires calculation of harvest levels at least every 10 years to ensure that they remain up to date with respect to inventory management objectives. Supplier contracts include a clause that require adherence to applicable legislation. Suppliers must also sign an assertion declaring that all feedstock originates from within the BP's defined supply base and is legally sourced.
Means of Verification	Supplier contract and assertion Provincial government reports List of applicable laws and regulations BMP manuals SFM certification The State of Canada's Forests Annual Report, 2019: https://www.nrcan.gc.ca/forests/report/16496 Natural Resources Canada, Measuring and Reporting: https://www.nrcan.gc.ca/forests/measuring-reporting/17487
Evidence Reviewed	All means of verification reviewed

Risk Rating	☑ **Low Risk**	☐ **Specified Risk**	☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	N/A		

	Indicator
2.3.2	Adequate training is provided for all personnel, including employees and contractors (CPET S6d).
Finding	**About 70-80%** of the BP's feedstock is forest management (FM) certified and acquired through PEFC chain of custody (COC) system. SFM certificate holders are required to maintain appropriate training for personnel and contractors so that they are competent to fulfil the responsibilities of the SFM standards. Furthermore, certificate holders undergo annual 3rd party audits, providing further assurance that this indicator is met. **The remaining ~20-30%** is uncertified feedstock from managed forests. The supply base is traceable back to the defined supply base (Indicator 1.1.2). The 20-30% of uncertified feedstock is primarily from private land in New Brunswick. Regional marketing boards represent private woodlot owners in the province. The marketing boards provide BMP manuals and will often provide SFI logger training to private woodlot owners and contractors. The most recent SFI logger training course was offered in 2016. All staff and contractors are trained to ensure they are aware and competent. The operations identify environmental and sustainable forestry training needs for employees and contractors to ensure that individuals performing tasks which can cause significant environmental impacts are competent on the basis of appropriate education, training and/or experience. Under the *Occupational Health and Safety Act*, each employer shall provide instruction, training and supervision as is necessary to ensure an employee's health and safety, provide and maintain in good condition such protective equipment as required by regulation and ensure that the equipment is used by an employee in the course of work. On an annual basis, the BP completes supplier evaluations on 25% of secondary suppliers. The supplier audit consists of a site visit to review and collect documentation on forest sources (location of the stump).The BP has also implemented a purchase wood risk assessment for all round wood purchases. Round wood purchases are evaluated annually; and depending on the associated risk, may be assessed based on forest practice compliance or have site visits and field inspections facilitated by the BP. In addition, the marketing boards conduct SFI BMP surveys and report on a random selection of private wood lots on an annual basis. Supplier contracts include a clause that require adherence to applicable legislation. Suppliers must also sign an assertion declaring that all feedstock originates from within the BP's defined supply base and confirming adherence to applicable legislation. Also refer to Indicator 2.8.1 in regards to health and safety regulations.
Means of Verification	Supplier contract and assertion Private woodlot owner/contractor agreement Training programs & matrix Electronic training records BP's annual supplier evaluations BP's Purchase wood risk assessment List of applicable laws and regulations NB SFI logger training certificates

Evidence Reviewed	All means of verification reviewed
Risk Rating	☑ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	N/A

	Indicator
2.3.3	Analysis shows that feedstock harvesting and biomass production positively contribute to the local economy, including employment.
Finding	The forest industry is one of Canada's most important manufacturing sectors. In 2018, ~210,000 people were employed in the forest industry, 7% of total exports were forest products, and $5.8 billion was contributed to the economy (The State of Canada's Forests Annual Report, 2019). The BP completed an economic analysis for the wood pellet plant and how it positively contributes to the local economy. The work force is hired locally in the adjoining communities where the pellet plant is located, and whenever possible, equipment, supplies and other resources are also sourced locally. There are 20 direct employees and the economic impact on local jobs cascades down from the pellet plant to trucking companies, local sawmills, harvesting contractors, etc. The facility also contributes to the community in the form of municipal taxes. Forest Nova Scotia's Forest Industry Economic Impact Report states that 11,500 Nova Scotians are employed directly and/or indirectly by the forest industry (Forest Nova Scotia, 2017). The total economic impact of the forest industry has increased from $1.5 billion in 2012 to $2.1 billion in 2017, and contributed $800 million to the provincial GDP in 2017. (http://forestns.ca/ns-forest-industry-economic-impact/) Forestry is one of the economic drivers of New Brunswick. Forest NB's 2016 *Economic Impacts Report* states 24,000 New Brunswickers are employed directly and/or indirectly by the forest industry. The forest industry contributes $1.7 billion to the New Brunswick economy. More communities benefit from economic impacts of forestry than almost any other sector in New Brunswick. (http://www.nbforestry.com/jobs-economy/) Forest industry in Quebec accounts for 2% of Quebec's GDP with $9 billion worth of exports in 2015 and 60,000 direct jobs, including 50,000 jobs in wood and paper manufacturing. The forest industry is an active presence and several municipalities depend entirely on the forest. Harvesting and processing are key economic drivers for many regions in Quebec. (*2016-2017 Budget – Competitiveness in the Quebec Forest Industry*)

Means of Verification	Supplier contract and assertion BP's economic analysis Employee addresses Account payables Supplier list Distance to suppliers The State of Canada's Forests Annual Report, 2019: https://www.nrcan.gc.ca/forests/report/16496 Conference Board of Canada Economic Update: https://www.conferenceboard.ca NS Forest Industry Economic Impact: http://forestns.ca/ns-forest-industry-economic-impact/ NB Forest Industry Economic Impact: https://www.forestnb.com/wp-content/uploads/2018/03/1FNB-Presentation-Mar2018-1.pdf 2016-2017 Budget – Competitiveness in the Quebec Forest Industry: www.budget.finances.gouv.qc.ca/budget/2016-2017/en/documents/Forest.pdf
Evidence Reviewed	All means of verification reviewed
Risk Rating	☑ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	N/A

	Indicator
2.4.1	The Biomass Producer has implemented appropriate control systems and procedures for verifying that the health, vitality and other services provided by forest ecosystems are maintained or improved (CPET S7a).
Finding	The supply base is traceable back to the defined supply base (Indicator 1.1.2). **About 70-80%** of the BP's feedstock is forest management (FM) certified and acquired through the PEFC chain of custody (COC) system. SFM certificate holders are required to maintain forest management and harvest plans consistent with best management practices. Furthermore, certificate holders undergo annual 3rd party audits to ensure that practices are consistent with SFM standards. **The remaining ~20-30%** is uncertified feedstock from managed forests; most is from private land in New Brunswick (NB) and a small percentage is from South Eastern Quebec (QC) or Nova Scotia (NS). Canada's provinces/territories have jurisdiction over the majority of Canada's forests and develop and enforce laws, regulations and policies related to the forest. They differ from one jurisdiction to another but all are based on SFM principles, developed in consultation with the public and industry and are grounded in scientific research and analysis. Forest laws ensure that timber harvesting is regulated and forests are re-established. **New Brunswick** Forest health and vitality are monitored through the provincial government. They determine the annual allowable cut for Crown and private woodlots based on ongoing research. Aerial photography and forest plots are used to chart the timber's growth and yields over time. These are updated annually using a computerized Geographical Information System (GIS). Most of the 20-30% of uncertified feedstock is from private land in New Brunswick. Regional marketing boards represent private woodlot owners in the province. Marketing boards distribute BMP guides to private woodlot owners or contractors – "Best Management Practices: A Practical Guide to BMP's in New Brunswick's Private Woodlots". The guide is supported by the

	SFI Implementation Committee in NB and lays out similar objectives to the SFI FM standard. This includes minimizing soil disturbance (rutting and sedimentation), selective harvesting, debris management (slash, tree tops, and dead wood), and proper watercourse and wetland protection. These BMPs are essential to the maintenance of healthy ecosystems. The marketing boards assist the private woodlot owners or contractors with forest management plans, timber inventory, harvest layout, and forest management plan development. The board will also offer SFI logger training to private woodlot owners and contractors. Private landowners and local communities in NB are diligent with monitoring of private forests, as they are an important source of income, employment, recreational activities and ecological benefits. NB Crown forest licensees must follow BMPs when implementing forest management plans. BMP manuals include goals for the maintenance of a full variety of healthy and resilient native forested ecosystems sustainable across their ecological range. This is achieved by maintaining functional patches of old forest across each ecoregion and representing the full diversity of mature forest ecosystems in protected natural areas. BMP manuals also specify guidelines for maintaining the function of site-specific habitats (bear den, rare species, etc.). Soil function is also an important component of a healthy forest. Harvest and silviculture operations on Crown land are required to preserve soil function, processes and health through minimizing disturbance and contamination. This includes minimizing rutting, spillage and net loss of productive forest area due to heavy harvest debris. **Nova Scotia** *Nova Scotia's Code of Forest Practice* states that forest management will be designed and conducted in a manner that maintains and enhances the quality of air, water, and soil. One of the principles of the Code is to ensure that forest management activities are conducted in a way that conserves and enhances the health and natural diversity of NS forest ecosystems. This includes management of the ecological landscape and stand level biodiversity through sustainable management practices. BMP's are provided to private woodlot owners through regional organizations who assist private woodlot owners in their forests' management. The forest protection division helps to maintain the health of NS woodlands by protecting them from pests and fires, and are divided into three sections: • The forest health section (advice and management of pests) • Risk services section (Provincial forest protection program) • Wildfire management section (Wildfire management) Each section works together to maintain forest health in Nova Scotia. The *Forests Act* was implemented to develop a healthy productive forest capable of yielding high volumes of high quality product. The Act is targeted to both private woodlot owners and Crown lands in the province. The provincial government is responsible for ensuring the enforcement of these acts. The NS Registry of Buyers requires businesses to inventory all primary forest products acquired for processing. Registered buyers contribute to a silviculture fund based on a volume of wood acquired basis. Annual reports list wood volumes harvested throughout the province. The registry also provides reliable data on market demands and estimates on sustainable harvest levels. **Quebec** The *Sustainable Forest Development Act* is used as a guideline when constructing forest management plans in QC. 92% of forests are considered public lands, and as of 2013, 90% of productive public forests were certified through recognized standards (PEFC, FSC, and SFI). SFM standards require BMPs to be carried out to promote the long term vitality and economic viability of the forest. The QC BMP manual (Saines Pratiques D'Intervention en Foret Privee, Guide Terrain, 4E, 2016) provides guidelines for silviculture treatments to promote long term growth and reduce negative impacts to the forest from harvesting. The majority of secondary feedstock originating from QC is sourced from FSC FM certified lands. FSC FM standards have requirements to maintain or enhance long term economic viability of the forest. The provincial government reports on the health and vitality of the province's forests every 5 years, and includes a summary of the volume of timber harvested, natural disturbances (fire, insects & disease) and forest protection measures.

	The supply base is defined and is traceable back to the source (Indicator 1.1.2). On an annual basis, the BP completes supplier evaluations on 25% of secondary suppliers. The supplier audit consists of a site visit to review and collect documentation on forest sources (location of the stump) to ensure that feedstock originates from within the supply base, and to identify how certified feedstock is traced back to the forest management unit. This control measure provides assurance to the BP that feedstock originates from within the defined supply base of the SBE. The BP has implemented a purchase wood risk assessment for all round wood purchases. Round wood purchases are evaluated annually; and depending on the associated risk, may be assessed based on forest practice compliance or have site visits and field inspections facilitated by the BP. In addition, NB marketing boards conduct SFI BMP annual surveys and reports on a random selection of private woodlots. These surveys evaluate conformance with BMPs and includes an evaluation of site cleanliness, soil quality (clean of oil and fuel spills, minimized ruts, use of slash), protection of wildlife habitats, and proper road and water crossings to prevent siltation. Supplier contracts include a clause that require adherence to applicable legislation. Suppliers must also sign an assertion declaring that all feedstock is legally sourced from within the BP's defined supply base.
Means of Verification	Supplier contracts and assertions NB SIC BMP survey and reports (private woodlots) Crown land licensee audits BP's annual supplier evaluations BP's purchase wood risk assessment List of applicable laws and regulations BMP manuals Natural Resources Canada, Measuring and Reporting: https://www.nrcan.gc.ca/forests/measuring-reporting/17487 Quebec - Chief Forester Reports: http://forestierenchef.gouv.qc.ca/ New Brunswick – New Approaches for Private Woodlots http://www2.gnb.ca/content/dam/gnb/Departments/nr-rn/pdf/en/ForestsCrownLands/NewApproachesForPrivateWoodlots.pdf New Brunswick–Balanced management approach for New Brunswick's Crown Forest http://www2.gnb.ca/content/dam/gnb/Departments/nr-rn/pdf/en/ForestsCrownLands/BMAF.pdf Nova Scotia – Registry of Buyers annual report http://novascotia.ca/natr/forestry/registry/ann_report.asp Nova Scotia Code of Forest Practice & Acts: https://novascotia.ca/natr/forestry/laws/ Quebec BMP manual: https://www.foretprivee.ca/je-protege-ma-foret/saines-pratiques-dintervention-forestiere/?contenu=les-interventions-en-foret FSC National Risk Assessment: https://ca.fsc.org/en-ca/standards/national-risk-assessment-01
Evidence Reviewed	All means of verification reviewed
Risk Rating	☑ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	N/A

	Indicator
2.4.2	The Biomass Producer has implemented appropriate control systems and procedures for verifying that natural processes, such as fires, pests and diseases are managed appropriately (CPET S7b).
Finding	The supply base is traceable back to the defined supply base (Indicator 1.1.2). **About 70-80%** of the BP's feedstock is forest management (FM) certified and acquired through the PEFC chain of custody (COC) system. SFM certificate holders are required to maintain forest management and harvest plans consistent with best management practices (BMP). Furthermore, certificate holders undergo annual 3rd party audits to ensure that practices are consistent with SFM standards. **The remaining ~20-30%** is uncertified feedstock from managed forests; most is from private land in New Brunswick (NB) and a small percentage is from South Eastern Quebec (QC) or Nova Scotia (NS). Forest fires, pests and diseases are monitored through each provincial government. **New Brunswick** The Department of Natural Resources' (NBDNR) Forest Pest Management Group is responsible for protecting forests from insects and disease. Common pests and diseases and a summary of forest pest conditions are reported and are available on the NBDNR website. https://www2.gnb.ca/content/gnb/en/departments/erd/natural_resources/content/ForestsCrownLands/content/ForestPests.html The provincial government's pest management program acts as a detection, monitoring and forecasting system. On an annual basis, detection and monitoring surveys (aerial, trapping and ground surveys) are completed to assess the potential impact of pests. If the pests surpass a previously determined threshold, preventative, suppressive or regulatory controls are used to control them. NB also has an online reporting system for the public to report forest pests or disease. (https://www2.gnb.ca/content/gnb/en/services/services_renderer.201173.html) Forest fires are monitored through DNR's Forest Fire Watch. If at any time the fire hazard in the province is high, the provincial government will restrict forestry operations in the province. The 20-30% of uncertified feedstock is primarily from private land in NB. Regional marketing boards represent private woodlot owners in the province. Marketing boards distribute BMP guides to private woodlot owners or contractors – "*Best Management Practices: A Practical Guide to BMP's in New Brunswick's Private Woodlots*". The guide is supported by the SFI Implementation Committee in NB and lays out similar objectives to the SFI FM standard. The guide provides guidance on the identification of invasive and exotic plants and animals and associated control measures. The marketing boards assist the private woodlot owners or contractors with forest management plans and mapping when needed. **Nova Scotia** The provincial government's forest protection branch helps to maintain the health of NS forests by protection from pests and fires. The branch is separated into 3 sections: 1) forest health section (advice and management of pests), 2) risk services section (forest protection program), and 3) wildfire management section. Each work together to ensure that fires, pests and diseases are managed throughout the province. The forest health group's vision is to use integrated pest management methods to promote healthy forest. Risk services group work on developing science and technology and building support tools for forest protection initiatives (https://novascotia.ca/natr/forestprotection/). Wildfire statistics are available on the NSDNR website:(https://novascotia.ca/natr/forestprotection/stats.asp) *Nova Scotia's Code of Forest Practice* states that forest management will be designed and conducted in a manner that maintains and enhances the quality of air, water, and soil. One of the principles in the code is to conduct forest management practices to secure a long term sustainable harvest of forest products. The guideline suggests monitoring, assessing risk,

	and protection to prevent impacts from insects, diseases, and fire through integrated management strategies. Regional organizations provide BMP guides to private woodlot owners and will also assist with private forest management. **Quebec** The *Sustainable Forest Development Act* is used as a guideline when constructing forest management plans in QC. 92% of forests are considered public lands, and as of 2013, 90% of productive public forests were certified through recognized standards (PEFC, FSC, and SFI). SFM standards require BMPs are carried out to promote the long term vitality and economic viability of the forest. The QC BMP manual (Saines Pratiques D'Intervention en Foret Privee, Guide Terrain, 4E, 2016) provides guidelines for silviculture treatments to promote long term growth and reduce negative impacts to the forest from harvesting. The majority of secondary feedstock originating from QC is sourced from FSC FM certified lands. FSC FM standards have requirements to maintain and enhance long term economic viability of the forest. The provincial government reports on the health and vitality of the province's forests every 5 years, and includes a summary of the volume of timber harvested, natural disturbances (fire, insects & disease) and forest protection measures. Forest protection strategies include measures to reduce the vulnerability of forests to insects and disease by planning preventative silvicultural interventions. The use of pesticides in the forest is relatively limited following the application of the government commitment to the Forest Protection Strategy which includes the elimination of chemical pesticides and herbicides in public forests. (https://mffp.gouv.qc.ca/les-forets/protection-milieu-forestier/strategie-protection-forets/) On an annual basis, the BP completes supplier evaluations on 25% of secondary suppliers. The supplier audit consists of a site visit to review and collect documentation on forest sources (location of the stump) to ensure that feedstock originates from within the supply base, and to identify how certified feedstock is traced back to the forest management unit. This control measure provides assurance to the BP that feedstock originates from within the defined supply base of the SBE. The BP has implemented a purchase wood risk assessment for all round wood purchases. Round wood purchases are evaluated annually; and depending on the associated risk, may be assessed based on forest practice compliance or have site visits and field inspections facilitated by the BP. In addition, the marketing boards conduct SFI BMP surveys and reports on a random selection of private wood lots on an annual basis. These surveys evaluate conformance with BMPs in each evaluated block. Supplier contracts include a clause that require adherence to applicable legislation. Suppliers must also sign an assertion declaring that all feedstock is legally sourced from within the BP's defined supply base.
Means of Verification	Supplier contracts and assertions NB SIC BMP survey and reports (private woodlots) BP's annual supplier evaluation List of applicable laws and regulations BMP manuals Canadian Forest Fire database: http://cwfis.cfs.nrcan.gc.ca/ha/nfdb Canadian Wildland Fire Information System http://cwfis.cfs.nrcan.gc.ca/interactive-map Quebec - chief forester reports: http://forestierenchef.gouv.qc.ca/ NB forest fire watch: https://www2.gnb.ca/content/gnb/en/news/public_alerts/forest_fire_watch.html Forest fire protection regulation: https://novascotia.ca/just/regulations/regs/forestfire.htm New Brunswick – New Approaches for Private Woodlots

	http://www2.gnb.ca/content/dam/gnb/Departments/nr-rn/pdf/en/ForestsCrownLands/NewApproachesForPrivateWoodlots.pdf New Brunswick – A balanced management approach for New Brunswick's Crown Forest https://www2.gnb.ca/content/dam/gnb/Departments/nr-rn/pdf/en/ForestsCrownLands/BMAF.pdf Nova Scotia – Registry of Buyers annual report http://novascotia.ca/natr/forestry/registry/ann_report.asp
Evidence Reviewed	All means of verification reviewed
Risk Rating	☑ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	N/A

	Indicator
2.4.3	The Biomass Producer has implemented appropriate control systems and procedures for verifying that there is adequate protection of the forest from unauthorised activities, such as illegal logging, mining and encroachment (CPETS7c).
Finding	The supply base is traceable back to the defined supply base (Indicator 1.1.2). Biomass is transported on trucks to the wood pellet plant. The BP purchases certified and uncertified fibre and round wood that originates from New Brunswick (NB), Nova Scotia (NS), and Quebec (QC). Primary round wood in New Brunswick and Quebec is sold through regional marketing boards. Marketing boards verify ownership of primary forest products through the Parcel Identification Number (PID) located on transportation certificates. The *Transportation of Primary Forest Products Act* requires the accurate completion of TC for each load of primary feedstock. The TC includes the PID which can trace the fibre back to the forest management unit. TCs are subject to audits through the provincial Department of Natural Resources (DNR). In Nova Scotia, any industry that procures more than 5,000 cubic meters of primary wood per year must report information on volumes and harvest sites to provincial DNR. These data are summarized in annual reports. The due diligence system (DDS) employed through the BP's PEFC COC certification includes requirements for local knowledge of supply base by staff, risk assessments, and supplier assertions. Regional risk assessments have been prepared for the entire supply base (NS, NB, and QC) and are reviewed on an annual basis. Supplier contracts include a clause requiring legal compliance. Assertions signed by each supplier declare that feedstock is legally sourced from within the BP's defined supply base of NB, NS or QC. Strong legislation is in place in NB, NS, and QC to ensure the scaling and transportation of logs and wood fibre is documented. Supplier contracts ensure that suppliers are adhering to applicable legislation and assertions state that wood fibre does not originate from controversial sources i.e. illegal or unauthorized sources (as discussed in previous findings). Risk assessments for each of the provinces through the BP's PEFC COC due diligence system.

Means of Verification	Supplier contracts and assertions NB, NS, QC risk assessment NB SIC BMP survey and reports (private woodlots) NB Crown licensee audits Transportation certificates Due diligence system List of applicable laws and regulations Canada's Legal Forest Products: http://www.sfmcanada.org/en/forest-products/legal-forest-products
Evidence Reviewed	All means of verification reviewed
Risk Rating	☑ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	N/A

	Indicator
2.5.1	The Biomass Producer has implemented appropriate control systems and procedures for verifying that legal, customary and traditional tenure and use rights of indigenous people and local communities related to the forest are identified, documented and respected (CPET S9).
Finding	*The Canadian Charter of Rights and Freedoms* forms the first part of the *Constitution Act* (1982). The bill guarantees certain political rights of Canadian citizens and civil rights to everyone in Canada. Aboriginal rights, like treaty rights, are recognized by Section 35 of the Constitution Act. Historically, aboriginal rights have been achieved by way of treaty or land claims settlement rather than through legislation. Supplier contracts/assertions require legal compliance to local and national regulations and legislation. Due to the scale of the assessment, the *FSC National Risk Assessment for Canada* (2020) took the precautionary approach and identified a specified risk designation for Canada in regards to the rights of Indigenous and Traditional Peoples being upheld. At the time of the assessment, data were unavailable or insufficient to determine the extent to which violations to indigenous rights as a result of forest management activities were occurring. It was noted in the FSC NRA that an assessment of infringement at the community level is best completed by the primary producer (organizations receiving wood and materials directly from the forest of origin). The FSC NRA also provides primary producers with a combination of control measures: 1. Indigenous People with legal and/or customary rights within the Forest Management Unit do not oppose the Forest Management Plan. 2. An agreement exists between Indigenous Peoples and the resource manager/supplier that follows the principles of Free, Prior and Informed Consent (FPIC). 3. An Indigenous-led or co-developed land use plan is in place within the supply area. 4. Best efforts to engage with Indigenous Peoples with legal and customary rights within the Forest Management Unit to understand if/how these rights are violated as a result of forest management activities, is demonstrated. For non-primary producers the NRA provides the following control measure: 1. A dispute resolution process is established specifically to address issues arising from violations of the right of Indigenous People related to forest management actives. The dispute resolution process is implemented in the event a dispute of substantial magnitude arises with the supply area.

	Primary forest products originate from 3 types of sources: 1. Private woodlots in NB and QC All round wood originating from private woodlots must be received through regional marketing boards. Transportation Certificates confirming the property identification (PID) must accompany each load. The PID assists in confirming deeded land ownership. Furthermore, there is no evidence that Indigenous People are opposing Forest Management Plans on private woodlots, so the FSC NRA (2020) Control Measure 1 applies to private woodlots in NB and QC, and these forested areas are considered low risk. 2. 3rd party FM certified industry freehold in New Brunswick Primary forest products that the biomass producer receives from industry freehold land are accompanied with a 100% forest management certified claim. The industry freehold organization undergoes annual 3rd party audits. These audits confirm land ownership and rights to the areas where these primary forest products are sourced. There is no evidence that Indigenous People are opposing Forest Management Plans on industry freehold lands, so the FSC NRA (2020) Control Measure 1 applies here as well, so primary forest products from NB industry freehold are given a low risk designation. 3. 3rd party FM certified Crown lands in New Brunswick Crown land forest management plans are reviewed and approved by New Brunswick Department of Natural Resources and most Crown lands in NB are 3rd party forest management certified. The Department of Natural Resources and Energy Development has allocated 5% of the Annual Allowable Cut on provincial Crown lands to First Nations communities since 1998 in an effort to generate employment and economic development opportunities. Commercial Harvesting Agreements between NRED and all fifteen First Nations communities in New Brunswick specify the volumes of softwood and hardwood allocated to each; and royalties from these volumes of Crown timber are directed to each community by NRED. There is evidence that Indigenous People are opposing Forest Management Planning in Crown forests in New Brunswick. The provincial government recognizes the importance of First Nations exercising their rights to hunt, fish and gather, and are actively implementing consultation strategies to ensure that the diverse values of First Nations are upheld in NB. Through early engagement and formal consultation processes, the government can protect Aboriginal and treaty rights and improve cultural awareness. In light of this, it is noted that currently, the provincial government are demonstrating their best efforts to engage with Indigenous Peoples and their legal and customary rights within the Forest Management Unit to understand if/how rights are violated as a result of forest management activities. Some secondary fibre originates from Nova Scotia and Quebec forests. Secondary fibre from Quebec is 100% FSC certified, and there is no evidence that Indigenous People are opposing Forest Management plans in Nova Scotia, so Control Measure 1 of the FSC NRA is applicable and a low risk rating is designated.
Means of Verification	Supplier contracts and assertions US Department of State on Canadian Human Rights: http://www.state.gov/g/drl/rls/hrrpt/2005/61719.htm National Aboriginal Rights Association: http://www.nafaforestry.org/pdf/2015/First%20Nation-Held%20Forest%20Tenure%20Report%202015.pdf Indigenous Forestry Initiative: http://www.nrcan.gc.ca/forests/federal-programs/13125
Evidence Reviewed	All means of verification reviewed

Risk Rating	☑ **Low Risk**	☐ **Specified Risk**	☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	N/A		

	Indicator
2.5.2	The Biomass Producer has implemented appropriate control systems and procedures for verifying that production of feedstock does not endanger food, water supply or subsistence means of communities, where the use of this specific feedstock or water is essential for the fulfilment of basic needs.
Finding	In Canada, legal disposition is in place to ensure that harvesting of feedstock doesn't encroach on the fulfilment of basic needs. The *FSC NRA* (2020) assesses resources that are fundamental to basic necessities of local communities or indigenous peoples. Water (sources for irrigation and community water) and areas of subsistence harvesting for indigenous peoples (hunting, fishing, trapping and plant collection) were evaluated. Each province delineates community watersheds as sources for drinking water or irrigation and has sufficient regulatory measures to mitigate any threats. Legal mechanisms are in place to mitigate the potential impacts to areas of subsistence harvesting for Indigenous People. The areas within the defined supply base were designated low risk by the FSC NRA with regards to subsistence of communities. (https://ca.fsc.org/en-ca/standards/national-risk-assessment-01) In New Brunswick (NB), the *Clean Water Act* aims to protect the quality of water for drinking and recreation. The *Watercourse and Wetland Alteration Regulation* of the *Clean Water Act* is intended to protect provincial streams rivers, wetlands and lakes from work or ground disturbance, and any company working within 30 meters is required to have a permit. About 40% of the population in New Brunswick obtain their water supply from surface watershed. Watersheds are protected under the *Watershed Protected Area Designation Order*. Forestry operations located within setback zones have restrictions on the type and volume of harvesting allowed. The *NB Private Woodlot Silviculture Program* manual provides guidance for adherence to NB regulations in regards to water conservation and protection. The *NB Crown land forest management manual* provides BMPs for maintaining the integrity of watercourses and wetlands to preserve the physical, chemical and biological properties and functions in their natural state. Furthermore, designated buffer zones must be adhered to in areas surrounding traditional high-recreation use waterways. Watercourse and wetland buffer zones are one of the management tools used to protect water quality and aquatic habitat on Crown land (Table 1 & 2, *Forest Management Manual for New Brunswick Crown Lands – Results-Based Forestry Option*). In Nova Scotia (NS), the *Code of Forest Practice* is mandatory on Crown land and recommended on private lands. The Code provides BMPs for maintaining and enhancing the quality of water (Code Principle 1.6): • Road and trail layouts must be designed to minimize the impact of construction activities on water regimes (1.6.1). • Designated watersheds are to have no more than 25% of the area in a state of recent (5 years or less) forest timber harvest (1.6.2) • Forest management within designated municipal water supply areas will require *Source Water Protection Plans* to protect water supplies (1.6.3). In Quebec (QC), annual forest management plans are based on a 5-year program, and must be approved by the Minister. The *Sustainability Forest Development Act* applies to

	both private and Crown forest, and establishes a forest regime designed to implement sustainable forest management through ecosystem-based development. This Act includes measures for the conservation of water, the protection of lakes, watercourse, riparian areas and wetlands, and water quality. Forestry operations building bridges or culverts or working near lakes and watercourses must comply with rigorous regulations to preserve the quality of the aquatic environment. (https://mffp.gouv.qc.ca/english/forest/understanding/understanding-management.jsp) Supplier contracts include a clause that require adherence to legislation and suppliers must sign an assertion that declares all feedstock is legally sourced from within the BP's defined supply base.
Means of Verification	Supplier contracts and assertions NB, NS and QC risk assessments BMP manuals Provincial Regulations FSC National Risk Assessment: https://ca.fsc.org/en-ca/standards/national-risk-assessment-01 NB Clean Water Act: https://www.canlii.org/en/nb/laws/stat/snb-1989-c-c-6.1/76685/ NS Code of Forest Practice: https://novascotia.ca/natr/forestry/laws/ QC Sustainable Forest Development Act: http://legisquebec.gouv.qc.ca/en/ShowDoc/cs/A-18.1
Evidence Reviewed	All means of verification reviewed
Risk Rating	☑ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	N/A

	Indicator
2.6.1	The Biomass Producer has implemented appropriate control systems and procedures for verifying that appropriate mechanisms are in place for resolving grievances and disputes, including those relating to tenure and use rights, to forest management practices and to work conditions.
Finding	90% of Canada's land area is Crown land (Federal & Provincial). The federal and provincial governments regulate the tenure & use rights and forest management practices on their land. Private land tenure is regulated through provincial acts and regulations (*NB's Land Titles Act, NS's Land Registration Act, and the Land registry of Quebec*). Private land use rights are regulated by the Provincial acts and municipal bylaws (*NB's Community Planning Act, NS Municipal Government Act, QC's Act Respecting Land Use Planning and Development*). Supplier contracts provide assurance that suppliers are following applicable legislation and regulations in regards to grievances and disputes, furthermore the contracts contain a clause related to dispute resolution. Furthermore, the biomass producer has an employee safety orientation, which includes a review of employee rights and health and safety regulations.

Means of Verification	Supplier contracts and assertions Provincial and federal legislation Private woodlot owner/contractor agreements Safety orientation program EMS manual
Evidence Reviewed	All means of verification reviewed
Risk Rating	☑ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	N/A

	Indicator
2.7.1	The Biomass Producer has implemented appropriate control systems and procedures for verifying that Freedom of Association and the effective recognition of the right to collective bargaining are respected.
Finding	Rights to Freedom of Association and to Collective Bargaining are protected under the Canadian Charter of Rights. Supplier contracts and assertions provide assurance that suppliers are complying with local and national legislation and regulations. The biomass producer provides all employees with an orientation handbook and policy manual. Safe job procedures and appropriate training is in place and is documented in a training matrix by the Health and Safety Coordinator. Occupational Health and Safety regulations for NB and NS are available on the company server (Health & Safety Act, WHMIS & First Aid regulations, and etc.). Shaw Resources' policy statement states that practical and effective measures are in place to protect the health and safety of employees, customers and contractors. The company motto is "No one will be hurt today or tomorrow". The Belledune pellet plant is unionized and currently has a collective agreement with the biomass producer; this demonstrates that workers have the rights of Freedom of Association and Collective Bargaining and have exercised them. Supplier contracts and assertion provide assurance that suppliers are following applicable legislation and regulations.
Means of Verification	Supplier contracts and assertions Provincial and Federal Employment Standard Acts and labour codes Canadian Charter of Rights Policy manual Training matrix BP's Collective agreement
Evidence Reviewed	All means of verification reviewed
Risk Rating	☑ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	N/A

	Indicator
2.7.2	The Biomass Producer has implemented appropriate control systems and procedures for verifying that feedstock is not supplied using any form of compulsory labour.
Finding	Human Resources staff complete an orientation with all new employees. The orientation includes a review of company policies (with built in requirements for legal compliance), employee identification verification, and employment contracts. Furthermore, employees are entered into the payroll system and receive payment and paystubs for work completed. The BPs policies are in compliance with regulations on compulsory labour (including the right to refuse work that is unsafe). Forest employment in Canada is regulated under federal and provincial labour codes to provide for a safe and healthy workplace, protect workers' rights to organize and are consistent with the ILO provisions. Supplier contracts and assertion provide assurance that suppliers are following applicable legislation and regulations.
Means of Verification	Supplier contracts & assertions Provincial and Federal Employment Standard Acts and labour codes Company human resource manuals and policies Employee identification Employee contract Payroll system and paystubs US Department of State on Canadian Human Rights: http://www.state.gov/g/drl/rls/hrrpt/2005/61719.htm Government of Canada Labour Program: https://www.canada.ca/en/employment-social-development/corporate/portfolio/labour.html Canadian Labour Standards Regulations: http://laws.justice.gc.ca/eng/regulations/C.R.C.,_c._986/ Government of Canada Employment Standards: http://www.cic.gc.ca/english/work/labour-standards.asp
Evidence Reviewed	All means of verification reviewed
Risk Rating	☑ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	N/A

	Indicator
2.7.3	The Biomass Producer has implemented appropriate control systems and procedures to verify that feedstock is not supplied using child labour.
Finding	Unicef's global database Indicates that 150 million children worldwide are engaged in child labour (https://data.unicef.org/topic/child-protection/child-labour/) . The data are broken down by country and show that there are 0 cases of child labour in Canada. The data are based on UNICEF-supported surveys. Human Resources staff complete an orientation with all new employees. This includes a review of company policies (with built in requirements for legal compliance), employee

	identification verification, and employment contracts. Furthermore, employees are entered into the payroll system and receive paystubs for work completed. The BP's corporate policy manual states that all new employees must have a minimum of grade 12 education or a level of education, training and skill deemed appropriate for the position. Forest employment in Canada is regulated under federal and provincial labour codes which prohibit child labour, provide for a safe and healthy workplace, protect workers' rights to organize and are consistent with the ILO provisions. There is no evidence of child labour violations. Supplier contracts and assertion provide assurance that suppliers are following applicable legislation and regulations.
Means of Verification	Supplier contracts & assertions Provincial and Federal Employment Standard Acts and labour codes Company human resource manuals and policies Employee identification Employee contract Payroll system and paystubs Unicef's Global Database https://data.unicef.org/ US Department of State on Canadian Human Rights: http://www.state.gov/g/drl/rls/hrrpt/2005/61719.htm Government of Canada Labour Program: https://www.canada.ca/en/employment-social-development/corporate/portfolio/labour.html Canadian Labour Standards Regulations: http://laws.justice.gc.ca/eng/regulations/C.R.C.,_c._986/ Government of Canada Employment Standards: http://www.cic.gc.ca/english/work/labour-standards.asp
Evidence Reviewed	All means of verification reviewed
Risk Rating	☑ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	N/A

	Indicator
2.7.4	The Biomass Producer has implemented appropriate control systems and procedures for verifying that feedstock is not supplied using labour which is discriminated against in respect of employment and occupation.
Finding	Human Resources staff complete an orientation with all new employees. This includes a review of company policies (with built in requirements for legal compliance), employee identification verification, and employment contracts. Furthermore, employees are entered into the payroll system and receive paystubs for work completed. The BP's corporate policy manual states that employees will not unlawfully discriminate against or harass on any basis and that there will be no discrimination towards any employee with respect to employment and occupation. Forest employment in Canada is regulated under federal and provincial labour codes which prohibit child labour, provide for a safe and healthy workplace, protect workers' rights to organize and are consistent with the ILO provisions. There is no evidence of discrimination violations between the company and their workers.

	Supplier contracts and assertion provide assurance that suppliers are following applicable legislation and regulations.
Means of Verification	Supplier contracts & assertions Provincial and Federal Employment Standard Acts and labour codes Company human resource manuals and policies e.g. anti-discrimination policies Employee contract Employee identification Payroll system & paystubs US Department of State on Canadian Human Rights: http://www.state.gov/g/drl/rls/hrrpt/2005/61719.htm Government of Canada Labour Program: https://www.canada.ca/en/employment-social-development/corporate/portfolio/labour.html Canadian Labour Standards Regulations: http://laws.justice.gc.ca/eng/regulations/C.R.C.,_c._986/ Government of Canada Employment Standards: http://www.cic.gc.ca/english/work/labour-standards.asp
Evidence Reviewed	All means of verification reviewed
Risk Rating	☑ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	N/A

	Indicator
2.7.5	The Biomass Producer has implemented appropriate control systems and procedures for verifying that feedstock is supplied using labour where the pay and employment conditions are fair and meet, or exceed, minimum requirements.
Finding	Human Resources staff complete an orientation with all new employees. This includes a review of company policies (with built in requirements for legal compliance), employee identification verification, and employment contracts. Furthermore, employees are entered into the payroll system and receive paystubs for work completed. The BP's corporate policy complies with regulations on minimum wage and remuneration. Forest employment in Canada is regulated under federal and provincial labour codes. Forest workers are protected by either federal or provincial laws. Employment standard laws protect the rights of workers in relation to work hours, pay rate, vacation, holidays, breaks, leaves of absences or termination. Supplier contracts and assertion provide assurance that suppliers are following applicable legislation and regulations.

Means of Verification	Supplier contracts & assertions Provincial and Federal Employment Standard Acts and labour codes Employee contract Employee Identification Payroll system and paystubs US Department of State on Canadian Human Rights: http://www.state.gov/g/drl/rls/hrrpt/2005/61719.htm Government of Canada Labour Program: https://www.canada.ca/en/employment-social-development/corporate/portfolio/labour.html Canadian Labour Standards Regulations: http://laws.justice.gc.ca/eng/regulations/C.R.C.,_c._986/ Government of Canada Employment Standards: http://www.cic.gc.ca/english/work/labour-standards.asp
Evidence Reviewed	All means of verification reviewed
Risk Rating	☑ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	N/A

	Indicator
2.8.1	The Biomass Producer has implemented appropriate control systems and procedures for verifying that appropriate safeguards are put in place to protect the health and safety of forest workers (CPET S12).
Finding	Worker's unions, government organizations, and employers monitor and verify health and safety requirements, equipment and safe work practices by workers. Furthermore the Worker's Compensation Boars have inspectors that verify work sites (including forestry operations) and can fine employers that aren't following health and safety regulations. Canada is a model for health and safety in the workplace and is designated as low risk in the *FSC National Risk Assessment for Canada* (2020). The provincial government is responsible for the implementation and enforcement of occupational health and safety regulations in each province. In New Brunswick, WorkSafe NB is responsible for overseeing the implementation and application of NB's *Occupational Health and Safety Act*. WorkSafe NB lists recent court cases, arbitration and compliance decision on the WorkSafe NB website: https://www.worksafenb.ca/policy-and-legal/cases-and-decisions/arbitration-decisions/. In Nova Scotia, the Department of Labour and Advanced Education are responsible for the enforcement of the provincial *Occupational Health and Safety Act* and regulations. The Department completes regular audits and responds to complaints in regards to health and safety and have the right to issue warnings, orders, recommendations or fines. Non-compliances and convictions can be found on the provincial website: https://novascotia.ca/lae/healthandsafety/ In Quebec, it is the Commission of Health and Security at Work (CSST) that is responsible for the enforcement of the *Occupational Health and Safety Act* in Quebec. Workplaces that are not in compliance with the act can be issued warnings, orders, recommendations, or fines. The CSST website: https://www.csst.qc.ca/lois_reglements_normes_politiques/Pages/loi_35.aspx Marketing boards often offer SFI logger training to private woodlot owners and contractors, while Crown and certified lands are required to have an appropriate level of

	training and education for the proper implementation of sustainable forest practices and objectives. Supplier contracts and assertion provide assurance that suppliers are following applicable legislation and regulations.
Means of Verification	Supplier contracts & assertions Provincial Occupational Health and Safety acts, regulations, and websites BP's health and safety program BP's Purchase wood risk assessment SFI logger training records
Evidence Reviewed	All means of verification reviewed
Risk Rating	☑ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	N/A

	Indicator
2.9.1	Biomass is not sourced from areas that had high carbon stocks in January 2008 and no longer have those high carbon stocks.
Finding	Wood fibre is not sourced from wetlands, peatlands, riparian reserve zones or protected areas. All harvesting is regulated by provincial forestry regulations which have stringent controls to ensure the protection of areas deemed to have high carbon stocks. The *National Inventory Report on Greenhouse Gas Sources and Sinks in Canada* (1990-2016), has shown an overall decrease in carbon emissions (Mt CO_2 Equivalent) for New Brunswick, Nova Scotia and Quebec over the period of 1990 to 2016. The Canadian government estimates sustainable wood supply by using information from all jurisdictions. Provincial Crown land harvests are regulated by the annual allowable cut (AAC). The AAC is the maximum volume of timber that may be harvested annually to ensure resource sustainability. The aggregate of all AACs throughout the country has been relatively constant since 1990, and in 2014, only 2/3 of the allowable cut was harvested (The State of Canada's forest, 2016).

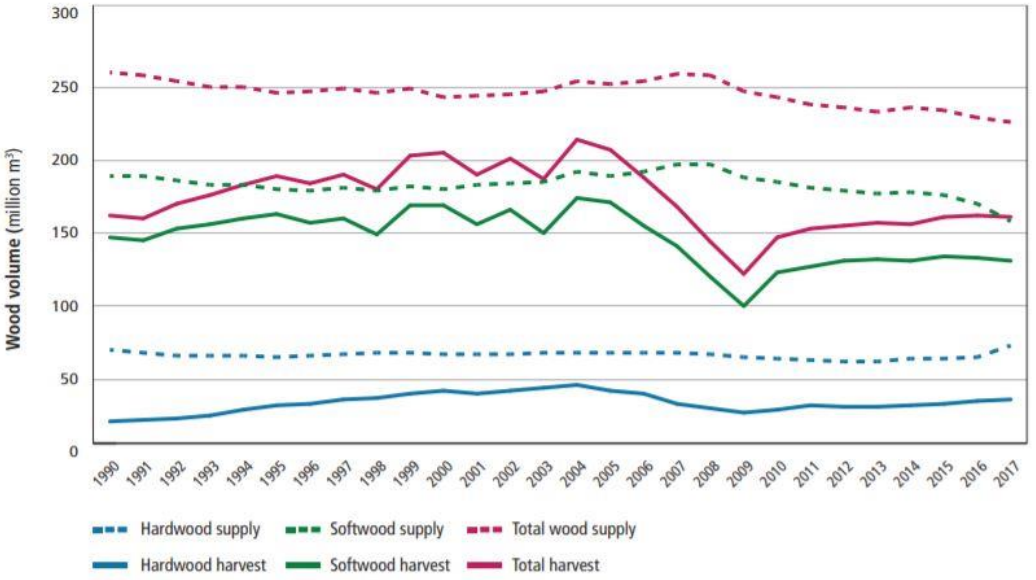


Figure 2.9.1-1: Annual harvest versus supply deemed sustainable for harvest, 2004-2017 (The State of Canada's Forests Annual Report, 2019)

The Canadian Forest Service (CFS) uses the National Forest Carbon Monitoring, Accounting and Reporting System (NFCMARS) to quantify GHG emissions and removals by forests, estimate the balance of the fluxes and track changes over time. Deforestation affects less than 0.02% of Canada's forests each year (NRCan, 2016).

In New Brunswick, the forest management manual states that forest management plans must demonstrate that the Annual Allowable Cut (AAC) is sustainable for an 80 year period. Management plans must show planned location, time and general prescription of harvest activities required to access the AAC and the areas set aside to achieve the objectives for terrestrial biodiversity, water quality, aquatic ecosystems and recreational opportunities; collectively termed the Conservation Forest (https://www2.gnb.ca/content/dam/gnb/Departments/nr-rn/pdf/en/ForestsCrownLands/ScheduleE_FMM_En.pdf).

In Nova Scotia, the *State of the Forest Report* states that forests have become a carbon sink since 2009, storing more carbon than what is being lost from forest harvesting. Furthermore, long term estimates of available wood supply indicate that harvest levels are sustainable.

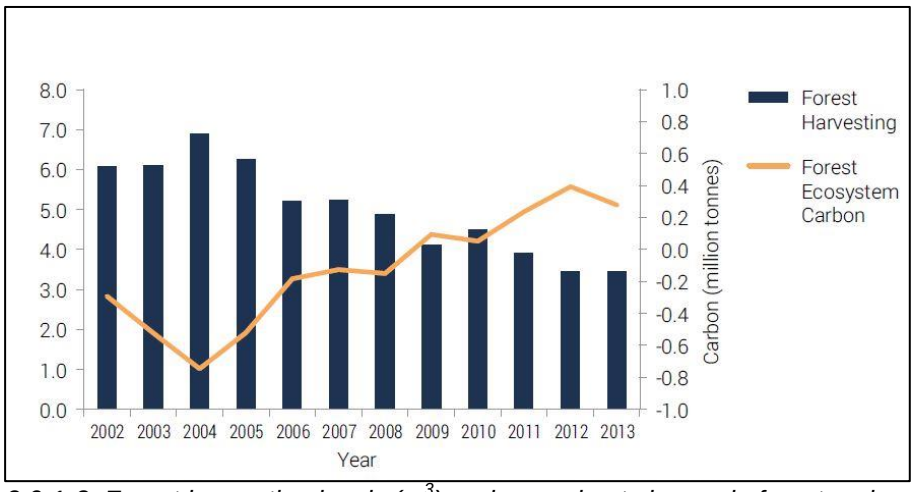
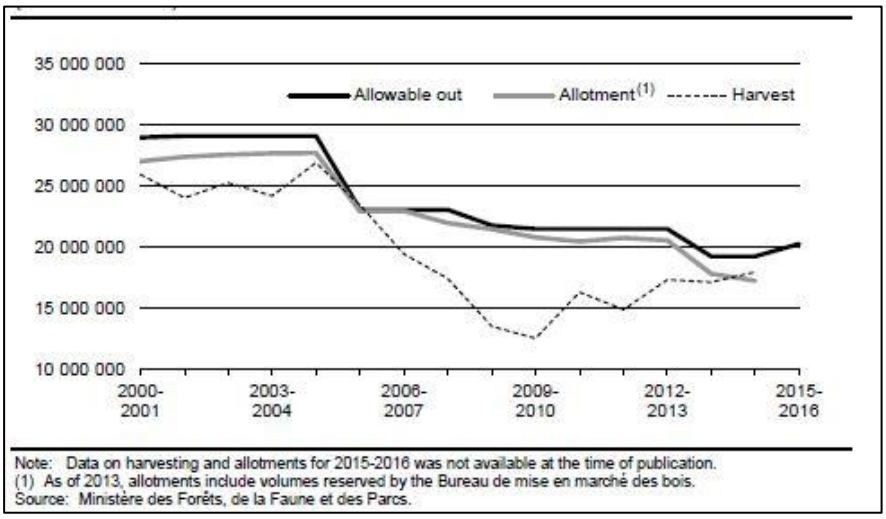


Figure 2.9.1-3: Forest harvesting levels (m^3) and annual net change in forest carbon in NS, 2002-2013 (State of the Forest Report, 2016)

In Quebec, the chief forester is responsible for calculating and updating the AAC every 5 years. The calculation includes the anticipated effects of natural disturbances from fire, insect

	infestations and disease. The AAC has decreased considerably in the past few years (The Quebec Economic Plan, 2016-2017)  *Figure 2.9.1-4: Changes in allowable cut, allotments and harvest from public forests in Quebec (The Quebec Economic Plan, 2016)* Supplier contracts and assertion provide assurance that suppliers are following applicable legislation and regulations. Each of the provinces have BMP manuals that help to ensure that controls are in place to prevent environmental impacts.
Means of Verification	Supplier contracts and assertions Provincial and federal legislation Government reports BMP manuals The State of Canada's Forest Annual Report: https://www.nrcan.gc.ca/forests/report/16496 National Pollution Release Inventory: https://www.canada.ca/en/services/environment/pollution-waste-management/national-pollutant-release-inventory.html Canadian National Forest Monitoring, Carbon and Accounting System: https://www.nrcan.gc.ca/forests/climate-change/carbon-accounting/13087 New Brunswick Forest Product Commission Report: https://www2.gnb.ca/content/dam/gnb/.../nr.../ForestsCrownLands/.../2012-2013.pdf Nova Scotia State of the Forest Report 2016: https://novascotia.ca/natr/forestry/reports/State_of_the_Forest_2016.pdf Quebec Economic Plan: http://www.budget.finances.gouv.qc.ca/budget/2018-2019/en/documents/EconomicPlan_1819.pdf
Evidence Reviewed	All means of verification reviewed
Risk Rating	☑ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	N/A

	Indicator

2.9.2	Analysis demonstrates that feedstock harvesting does not diminish the capability of the forest to act as an effective sink or store of carbon over the long term.
Finding	Reforestation is mandated for all Crown lands within each of the provinces and the company's supply areas. The Canadian government estimates sustainable wood supply by using information from all jurisdictions. Provincial Crown land harvests are regulated by the annual allowable cut (AAC). The aggregate of all AACs throughout the country has been relatively constant since 1990, and in 2014, only 2/3 of this allowable cut was harvested (The State of Canada's forest, 2016). The National Inventory Report on Greenhouse Gas Sources and Sinks in Canada (1990-2016), has shown an overall decrease in carbon emissions (Mt CO_2 Equivalent) for New Brunswick, Nova Scotia and Quebec over the period of 1990 to 2016. The Land Use, Land-Use Change and Forestry Sectors reported anthropogenic GHG fluxes between atmosphere and Canada's managed lands as having a net flux that amounted to the removal of 28 MT of atmospheric CO_2. The New Brunswick (NB) provincial government defines goals, objectives and requirements for forest management plans. They also define the boundaries of protected areas, habitats and other special management zones that form the conservation forest. NB Crown land licensees must have forest management plan maps that span a period of 10 year and are sustainable over 80 years. NBDNR evaluates licensee's forest management performance on a five year interval, which is based on a set of predetermined goals, objectives, indicators and outcomes. Any catastrophic natural disturbance (forest fire, insect outbreak, disease, etc.) triggers an update to the plan. Harvesting from private forest sources in NB is monitored through regional marketing boards. Marketing boards offer assistance to private woodlot owners with forest management planning, including calculating timber inventory, defining harvest layout, and developing management plans. The marketing boards will also offer programs that promote sustainable forest management and for SFI logger training. The provincial government partners with private woodlot owners and marketing boards to fund silviculture treatments. A *Landowner Agreement* must be signed with Department of Energy and Resource Development (ERD) to be eligible for silviculture treatment on a private woodlot. Any woodlot that has received silviculture funding may be inspected to ensure best management practices (BMPs) and guidelines outlined in the *New Brunswick Private Woodlots Silviculture Manual* are being followed. In Nova Scotia, the enforcement of the *NS Forests Act* on Crown and private lands supports the development of a healthy productive forest capable of yielding high volumes of high quality product. The enforcement division of NSDNR completes regular inspections of harvest sites. *Nova Scotia's Code of Forest Practice* promotes sustainable forest management (SFM) in the province. SFM is required on Crown lands and highly encouraged on private woodlots in Nova Scotia. The majority of primary wood products supplied to industry in the province are from private sources. The provincial government develops forest management training programs and financial incentives to further encourage the sustainable use of private woodlots. The Nova Scotia Registry of Buyers requires businesses to inventory all primary forest products acquired for processing. Registered buyers contribute to a silviculture fund based on the volume of wood acquired. The *Registry of Buyers' annual report* outlines the volumes of wood harvested throughout the province and provides reliable data on market demands and estimates on sustainable harvest levels. In Quebec, the *Sustainable Forest Development Act* was implemented in 2010. The act gives the Minister of Natural Resources (MRN) greater control and responsibility over Crown forest management. This includes maintaining ecosystem-based management plans that maintain ecosystem biodiversity and viability. The MRN offers technical and financial support to woodlot owners that practice sustainable forest management. This support is presented through regional agencies that help with the preparation of a

	protection and development plan and financial and technical support. Only certified private forests have access to these government programs Supplier contracts and assertion provides assurance that suppliers are following applicable legislation and regulations. See 2.9.1 in regards to sustainable harvest levels.
Means of Verification	Supplier contracts and assertions NB SIC survey Federal and Provincial Acts & Regulations Provincial and federal government reports NB SIC BMP survey and reports (private woodlots) Best management practices
Evidence Reviewed	All means of verification reviewed
Risk Rating	☑ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	N/A

	Indicator
2.10.1	Genetically modified trees are not used.
Finding	The Food and Agricultural Organization of the United Nations summarizes that no GMO trees are used commercially in Canada. Genetically engineered forest trees are not approved for commercial plantings in Canada. The Federal Food Inspection Agency confirms that confined field trials of plants with novel traits are limited to scientific research. None of the harvested tree species are listed on the list of plants with novel traits (PNT) on the CFIA database. The *FSC NRA* (2020) assigned a low risk for the use of genetically modified tree usage in Canada.
Means of Verification	Supplier contracts and assertions FAO Reports CFIA Database FSC National Risk Assessment: https://ca.fsc.org/en-ca/standards/national-risk-assessment-01
Evidence Reviewed	All means of verification reviewed
Risk Rating	☑ **Low Risk** ☐ **Specified Risk** ☐ **Unspecified Risk at RA**
Comment or Mitigation Measure	N/A