

SBP Standard 1: Feedstock Compliance

Principle 2 – Biomass sourcing does not harm the environment

Revision Draft v1 for Public Consultation

(for status see document history on page ii)

Sustainable Biomass Program sbp-cert.org



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Document history

(see Standards Development Process Terms of Reference v1, page 29)

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Principle 2 – Biomass sourcing does not harm the environment



2	Principle 2. Biomass feedstock is sustainably sourced	2	Principle 2 – Biomass sourcing does not harm the environment
	Includes parts of:	2.1	Criterion
	Criterion 2.1: Management of the forest ensures that features and species of outstanding or exceptional value are identified and protected (CPET S8a; S8c)		Biodiversity is maintained or enhanced.
	Criterion 2.2: Management of the forest ensures that ecosystem function is assessed and maintained, through both the conservation/set-aside of key ecosystems or habitats in their natural state, and the maintenance of existing ecosystem functions throughout the forest (CPET S5; S5a; 8b)		
	Criterion 2.4: Management of the forest ensures that forest ecosystem health and vitality is maintained (CPET S7)		
2.1.1	Indicator		
	The BP has implemented appropriate control systems and procedures for verifying that forests and other areas with high conservation value in the Supply Base are identified and mapped.		
	Examples of Means of Verification		
	Internet research		
	GIS maps of HCV areas		
	Interviews		
	Regional, publicly available data from a credible third party		
	The existence of a strong legal framework in the region		
	Sources of information include		

		(500)
	The High Conservation Value Network http://www.hcvnetwork.org/	
	IUCN <u>http://www.iucnredlist.org/</u>	
	• SFI Section 6: Guidance to SFI 2015- 2019 Standard, January 6. 2014 Forests with Exceptional Conservation Value <u>http://www.sfiprogram.org/files/pdf/draftsfi-2015-2019-standard-section-6/</u>	
	NatureServe <u>http://www.natureserve.org/</u>	
	The Global Forestry Risk Register http://www.globalforestregistry.org/	
2.1.2	Indicator	
	The BP 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.	
	Examples of Means of Verification	
	• Maps	
	 Guidance provided by BPs to suppliers/forest operators, regarding threats to the identified forests and areas with high conservation values, and verification of conformance through field inspections 	
	Regional Best Management Practices	
	Standard Operating Procedures	
	Codes of Practice	
	Records of BPs' field inspections	
	Monitoring records	
	Interviews with staff	
	Publicly available information on the protection of the values identified	
	Regional, publicly available data from credible third parties	
	Environmental Impact Statements or Environmental Risk Assessment	

			Sop
	Reports		
	The existence of a strong legal framework in the region		
	Guidance		
	The potential impacts of management activities on forests and other areas with high conservation values and biodiversity should be evaluated, and BPs should have systems in place to verify that mitigation measures are implemented in the field.		
	Forests and other areas with high conservation values include those habitats in which protected and endangered plant and animal species are found.		
	There is communication with suppliers/forest operators, and they are provided with records of meetings, talks, workshops, etc.		
	Impacts include those originating in the area of operation but impacting outside the area of operation, such as downstream.		
	Sources of information include		
	The High Conservation Value Network http://www.hcvnetwork.org/		
	SFI Section 6: Guidance to SFI 2015-2019 Standard, January 6. 2014 Forests with Exceptional Conservation Value <u>http://www.sfiprogram.org/files/pdf/draftsfi-2015-2019-standard-section-6/</u>		
	NatureServe http://www.natureserve.org/		
	The Global Forestry Risk Register <u>http://www.globalforestregistry.org/</u>		
2.2.3	Indicator	2.1.1	Indicator
	The BP has implemented appropriate control systems and procedures to ensure that key ecosystems and habitats are conserved or set aside in their		The organisation has implemented appropriate control systems and procedures to ensure that:
	natural state (CPET S8b).		Key species, habitats and ecosystems and other areas of high conservation value in the Supply Base are maintained or enhanced.
			This shall include that all such values and sites in the Supply Base are:

	Identified and mapped
	That the potential threats from management activities to them are identified and evaluated; and
	 That key ecosystems and key habitats are conserved or set aside in their natural state
Examples of Means of Verification	[Means of Verification moved to S2 and new standalone document]
Maps	
 Standard Operating Procedures, Codes of Practice and monitoring records indicate that appropriate safeguards are implemented 	
Guidance	Guidance
Key ecosystems or habitats include areas with statutory designations or	Identification and mapping:
high conservation value. Such conservation of set	The HCV Approach as set out in the HCVRN Common Guidance for the
aside areas need to be of sufficient size or suitably connected with other similar areas to ensure their long-term viability. The BP should, in its procurement policies and practices, define the areas it considers to be key ecosystems or habitats and the reasons for its decisions.	identification of High Conservation Values is best practice across different ecosystems and production systems and should be followed wherever possible.
	The organisation shall justify which tool they are using to identify and map high conservation values.
	Forests and other areas with high conservation values include those habitats in which protected and endangered plant and animal species are found.
	The assessment shall identify the presence of any rare, threatened an endangered species (from CPET) as well as any features and species o outstanding or exceptional value.
	Values and areas needed to support those values should be identified and mapped prior to harvesting and other operations.
	Assessments should draw on relevant information where available and the collection of additional information when necessary.
	Relevant stakeholders with knowledge of the values and or impacted/dependen on them should be engaged in identifying and mapping the values.

	The potential impacts of management activities on forests and other areas with high conservation values, key ecosystems and habitats shall be evaluated.
	Threats are those impacts that undermine the identified values.
	Threats can include, but are not limited to:
	 The loss, damage to and/or fragmentation of habitats leading to the degradation of identified values
	A decline in the ecosystem services provided
	Impacts include those originating in the area of operation, but which may affect areas downstream or external to the area of operation.
	The organisations shall communicate with suppliers, forest and other operators, and provide them with records of meetings, talks, workshops, etc.
	Maintaining or enhancing:
	Appropriate mitigation measures should be implemented.
	Organisations should have systems in place to verify that mitigation measures are implemented in the field.
	This could include identifying areas where operations are not compatible with protecting the identified values.
	Set aside areas need to be of sufficient size or suitably connected with other similar areas to ensure their long-term viability and function.
	The organisation should, in its procurement policies and practices, define the areas it considers to contain high conservation values, be key ecosystems or habitats and the reasons for its decisions.
Sources of information include	Sources of information include
RSB Conservation Impact Assessment Guidelines RSB-GUI-01-007-01	The High Conservation Value (HCV) Network: https://hcvnetwork.org/
IUCN http://www.iucnredlist.org/	 International Union for the Conservation of Nature (IUCN): <u>https://www.iucnredlist.org/</u>
	 Sustainable Forestry Initiative (SFI). Requirements for the SFI 2015-2019 Program. Section 6. Guidance to SFI 2015-2019 Extended through December 2021. Standards and Rules January 2017 Chapter 6.1 SFI 2015-

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			 2019 Forest Management Standard Objective 4: Conservation of Biological Diversity. Forests with Exceptional Conservation Value: <u>https://forests.org/wp-</u> <u>content/uploads/2015_2019StandardsandRules_Section6_June2019.pdf</u> NatureServe: <u>http://www.natureserve.org/</u> Preferred by Nature Sourcing Hub: <u>https://preferredbynature.org/sourcinghub</u> ESC Biol. eccement platform: https://fore.org/maintenant/fore.org/maintenant/fore.org/
			platform
			RSB Conservation Impact Assessment Guidelines RSB-GUI-01-007-01: <u>https://rsb.org/wp-content/uploads/2020/06/RSB-GUI-01-007-01-RSB-Conservation-IA-Guidelines_3.0.pdf</u>
2.2.4	Indicator	2.1.2	The organisation has implemented appropriate control systems and procedures
	The BP has implemented appropriate control systems and procedures to		to ensure that:
	ensure that biodiversity is protected (CPET S5b).		Biodiversity is protected.
	Examples of Means of Verification		[Means of Verification moved to S2 and new standalone document]
	Regional Best Management Practices		
	Supply contracts		
	 Assessment of potential impacts at operational level and of measures to minimise impacts 		
	Monitoring results		
	• Publicly available information on the protection of the identified values		
	Level of enforcement		
	Regional, publicly available data from a credible third party		
	The existence of a strong legal framework in the region		

	Guidance		Guidance
	BPs should evaluate the likely impacts of management practice and feedstock harvesting on ecosystems and biodiversity, and appropriate		This indicator focuses on general considerations related to maintaining a diversity of flora and fauna in the landscape and at the stand level.
	mitigation measures should be implemented. Impacts should be monitored and there should be a mechanism by which the monitoring results are fed back into operational practice.		Organisations should evaluate the likely impacts of operations and feedstock harvesting on general biodiversity, and manage operations in order to maintain or improve biodiversity in the landscape.
	Impacts include those originating in the area of operation, but which may affect areas downstream or external to the area of operation.		Possible impacts include, but are not limited to:
			The effect of forest structure change at a landscape level
			Effects on species richness and distribution
			a decline in the ecosystem services provided
			• The maintenance of key habitat features at a forest stand level (i.e. standing dead trees, deadwood on the forest floor, hard and soft mast producing trees, streamside buffers, etc.)
			The impacts of sourcing on invasive species
			• The impacts of pollution (link to indicators 2.2.3, 2.2.4 and 2.2.5)
			Impacts include those originating in the area of operation, but which may affect areas downstream or external to the area of operation.
			Impacts of biomass sourcing should be understood and methods to maintain or enhance biodiversity should be implemented in operational harvests.
2.2	Includes Parts of:	2.2	Criterion
	Criterion 2.2: Management of the forest ensures that ecosystem function is assessed and maintained, through both the conservation/set-aside of key ecosystems or habitats in their natural state, and the maintenance of existing ecosystem functions throughout the forest (CPET S5; S5a; 8b)		Ecosystems, their productivity, functions and services are maintained or enhanced.
	Criterion 2.3: Management of the forest ensures that productivity is maintained (CPET S6; S6a; S6e)		
	Criterion 2.4: Management of the forest ensures that forest ecosystem health and vitality is maintained (CPET S7)		



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	Global Forest Watch http://www.globalforestwatch.org/		Accountability Framework (AFI) 2019. Terms and Definitions: https://accountability-framework.org/wp-content/uploads/2019/07/Definitions.pdf
2.2.1	Indicator The BP 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.	2.2.2	Indicator The Organisation has implemented appropriate control systems and procedures for verifying that: • There is assessment of impacts on ecosystems, their productivity, functions and services in the Supply Base, and • There is planning, implementation and monitoring of actions to minimise them
	 Examples of Means of Verification Regional Best Management Practices Supply contracts Assessment of potential impacts at operational level Assessment of measures to minimize impacts Monitoring results Publicly available information on protecting the values identified Level of enforcement Regional, publicly available data from a credible third party The existence of a strong legal framework in the region 		
	Guidance Potential impacts of feedstock harvesting on ecosystems and biodiversity should be identified, with mitigation measures implemented in the field as necessary. Impacts should be monitored and there should be a mechanism to feed monitoring results back into operational practice.		GuidancePotential impacts of operations on ecosystems should be identified, with mitigation measures implemented in the field as necessary.Impacts should be monitored and there should be a mechanism to feed monitoring results back into operational practice.Impacts include those originating in the area of operation but impacting outside the area of operation, such as downstream.

	 Impacts include those originating in the area of operation but impacting outside the area of operation, such as downstream. Assessment planning, implementation and monitoring should be based on scientific research and, if needed, information on comparable forests types. BPs may require suppliers and forest owners to adopt specific Best Management Practices and to be certified for certain tasks. These should be specified in purchasing or procurement policies. Feedstock sourced from stump material will require specific controls to minimise impact. Avoidable damage to the ecosystem is prevented by application of the most suitable and available methods and techniques for logging and road construction under the prevailing conditions. 		Assessment planning, implementation and monitoring should be based on scientific research and, if needed, information on comparable forests and other landscape types. Organisations may require suppliers and forest and other land owners to adopt specific Best Management Practices and to be certified for certain tasks. These should be specified in purchasing or procurement policies. Feedstock sourced from stump material will require specific controls to minimise impact (see 2.2.4 and 3.1.1). Avoidable damage to the ecosystem is prevented by application of the most suitable and available methods and techniques for logging and road construction under the prevailing conditions.
2.2.2	Indicator	2.2.3	Indicator
	The BP has implemented appropriate control systems and procedures for verifying that feedstock is sourced from forests where management maintains or improves soil quality (CPET S5b)		The Organisation has implemented appropriate control systems and procedures for verifying that: Management maintains or improves soil quality.
	Examples of Means of Verification		[Means of Verification moved to S2 and new standalone document]
	Regional Best Management Practices		
	Supply contracts		
	Records of BPs' field inspections		
	Assessment at an operational level of measures designed to minimize impacts on the values identified		
	Soil monitoring records		
	Interviews with staff		
	Publicly available information on the protection of soil		
	Level of enforcement		



The existence of a strong legal framework in the region	
Guidance	Guidance
Potential impacts of feedstock harvesting on soil should be identified, with mitigation measures implemented in the field as necessary. Impacts should	Potential impacts of operations on soils should be identified, with mitigation measures implemented in the field as necessary.
be monitored and there should be a mechanism to feed monitoring results back into operational practice.	The following impacts shall be assessed and if necessary, mitigation measures implemented in the field to ensure that:
BPs may require suppliers and forest owners to adopt specific Best Management Practices and to be certified for certain tasks.	Erosion is minimised
These should be specified in purchasing or procurement policies.	Organic matter content is enhanced
	Nutrient balance, fertility and cycling is maintained
	Contamination is prevented and minimised
	Compaction is prevented and minimised
	Other impacts that could be identified and mitigated include:
	Salinisation and alkalinisation
	Acidification
	Soil biodiversity impacts
	Sealing
	Soil water management
	Impacts should be monitored and there should be a mechanism to feed monitoring results back into operational practice.
	Organisations may require suppliers and forest owners to adopt specific Best Management Practices and to be certified for certain tasks.
	These should be specified in purchasing or procurement policies.
	Sources of information include
	Voluntary Guidelines for Sustainable Soil Management FAO 2017: <u>http://www.fao.org/3/bl813e/bl813e.pdf</u>

2.5	Indicator	224	Indicator
2.2.0	The BP has implemented appropriate control systems and procedures for verifying that the process of residue removal minimises barm to	2.2.4	The Organisation has implemented appropriate control systems and procedures for verifying that:
	ecosystems.		The removal of residues minimises harm to ecosystems.
	Examples of Means of Verification		[Means of Verification moved to S2 and new standalone document]
	Regional Best Management Practices		
	Supply contracts		
	Records of BPs' field inspections		
	Operational Assessment of measures designed to minimise impacts on the values identified		
	Monitoring records		
	Interviews with staff		
	Publicly available information on the protection of ecosystems		
	Level of enforcement		
	Regional, publicly available data from a credible third party		
	• The existence of a strong legal framework in the region		
	Guidance		Guidance
	'Residue' includes treetops and branches.		Likely impacts of residue removal should be identified, and appropriate mitig
	Likely impacts of residue removal should be identified, and appropriate mitigation measures should be implemented. Impacts		These include but are not limited to:
	should be monitored and there should be a mechanism to feed monitoring results back into operational practice.		Impacts of the process of residue removal as well as the absence of that material once removed
	Impacts include those originating in the area of operation, but which may affect areas downstream or external to the area of operation.		 Impacts on soil quality – fertility, organic matter content, structure and compaction, water retention and chemistry;
	BPs may require suppliers and forest owners to adopt specific Best Management Practices and to be certified for certain tasks.		Impacts on carbon storage (link to 3.1.1)

	These should be specified in purchasing or procurement policies.		 Impacts on biodiversity - availability of dead organic matter serving as a niche and food source for wildlife
			Impacts on tree and stand regeneration including fire risk
			Impacts on access and amenity
			Impacts should be monitored and there should be a mechanism to feed monitoring results back into operational practice.
			Impacts include those originating in the area of operation, but which may affect areas downstream or external to the area of operation.
			Organisations may require suppliers and forest owners to adopt specific Best Management Practices and to be certified for certain tasks.
			These should be specified in purchasing or procurement policies.
2.2.6	Indicator	2.2.5	Indicator
	The BP 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).		The Organisation has implemented appropriate control systems and procedures for verifying that:
			The impacts on ground water, surface water and water downstream from operations are minimised.
	Examples of Means of Verification		[Means of Verification moved to S2 and new standalone document]
	Regional Best Management Practices		
	Supply contracts		
	Records of BPs' field inspections		
	 Assessment at an operational level of measures designed to minimize impacts on the values identified 		
	Monitoring records		
	Interviews with staff		
	Publicly available information on the protection of ground and surface water		
	water		



 Regional, publicly available data from a credible third party The existence of a strong legal framework in the region 	
Guidance	Guidance
This Indicator includes impacts outside the direct area of operation, such as runoff from harvesting operations, fertiliser or chemical application.	Potential impacts of operations on water should be identified, with mitigation measures implemented in the field as necessary.
Impacts on riparian zones are included in the evaluation of compliance with	Impacts on water may include but are not limited to:
this indicator.	Quality:
originating in the area of operation, but which may affect areas downstream	Diffuse and point pollution
or external to the area of operation.	Siltation/sedimentation
BPs may require suppliers and forest owners to adopt specific Best Management Practices and to be certified for certain tasks	Eutrophication and deoxygenation
These should be specified in purchasing or procurement policies.	Acidification
	Insolation and temperature impacts
	Riparian habitat change
	Quantity:
	Soil and ground water depletion
	Surface runoff
	Flood mitigation
	Drainage of wetlands and peat soils
	This Indicator includes impacts outside the direct area of operation, such as runoff from harvesting operations, fertiliser or chemical application.
	Impacts on riparian zones are included in the evaluation of compliance with this Indicator.
	Likely impacts on water should be identified.
	Impacts include those originating in the area of operation, but which may affect areas downstream or external to the area of operation.

22.7 Indicator 22.6 Indicator The BP has implemented appropriate control systems and procedures for verifying that air quality is not adversely affected by forest management activities. 22.6 Indicator The BP has implemented appropriate control systems and procedures for verifying that air quality is not adversely affected by forest management activities. 22.6 Indicator The BP has implemented appropriate control systems and procedures for verifying that: activities. Indicator The SP has implemented appropriate control systems and procedures for verifying that: Indicator The Organisation has implemented appropriate control systems and procedures for verifying that: Air quality is not adversely affected by operations Indicator Indicator • Regional Best Management Practices Supply contracts [Means of Verification moved to S2 and new standalone document] • Records of BPs' field inspections • Assessment at an operational level of measures designed to minimize impacts on the values identified [Means of Verification moved to S2 and new standalone document] • Level of enforcement • Regional, publicly available data from a credible third party • The existence of a strong legal framework in the region Potential impacts on air quality should be identified. Impacts include those originating in the area of operation, but which affect areas downwind or external to the area of operation, but which affe				
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 The existence of a strong legal framework in the region Guidance Potential impacts on air quality should be identified. Impacts include those originating in the area of operation, but which affect areas downwind or external to the area of operation. BPs may require suppliers and forest owners to adopt specific Best Management Practices and to be certified for certain tasks. Guidance Potential impacts from machinery and use of fire NOx and ammonia – from fertility management NOx and ammonia – from fertility management		Regional, publicly available data from a credible third party		
Guidance Guidance Potential impacts on air quality should be identified. Potential impacts on air quality should be identified, with mitigation measures implemented in the field as necessary. Impacts include those originating in the area of operation, but which affect areas downwind or external to the area of operation. Potential impacts on air quality should be identified, with mitigation measures implemented in the field as necessary. BPs may require suppliers and forest owners to adopt specific Best Management Practices and to be certified for certain tasks. • Particulates from machinery and use of fire • NOx and ammonia – from fertility management		The existence of a strong legal framework in the region		
 Potential impacts on air quality should be identified. Impacts include those originating in the area of operation, but which affect areas downwind or external to the area of operation. BPs may require suppliers and forest owners to adopt specific Best Management Practices and to be certified for certain tasks. Potential impacts on air quality should be identified, with mitigation measures implemented in the field as necessary. Impacts on air include but are not limited to: Particulates from machinery and use of fire NOx and ammonia – from fertility management 		Guidance		Guidance
Impacts include those originating in the area of operation, but which affect areas downwind or external to the area of operation. Implemented in the field as necessary. BPs may require suppliers and forest owners to adopt specific Best Management Practices and to be certified for certain tasks. Implemented in the field as necessary. Implemented in the field as necessary. Impacts on air include but are not limited to: BPs may require suppliers and forest owners to adopt specific Best Management Practices and to be certified for certain tasks. NOx and ammonia – from fertility management 		Potential impacts on air quality should be identified.		Potential impacts on air quality should be identified, with mitigation measures
BPs may require suppliers and forest owners to adopt specific Best Management Practices and to be certified for certain tasks.		Impacts include those originating in the area of operation, but which affect areas downwind or external to the area of operation		Implemented in the field as necessary.
Management Practices and to be certified for certain tasks.		BPs may require suppliers and forest owners to adopt specific Best Management Practices and to be certified for certain tasks.		Particulates from machinery and use of fire
				NOx and ammonia – from fertility management

	These should be specified in purchasing or procurement policies.		VOCs – from use of fuels and other chemicals
			Impacts include those originating in the area of operation, but which affect areas downwind or external to the area of operation.
			Organisations may require suppliers and forest owners to adopt specific Bes Management Practices and to be certified for certain tasks.
			These should be specified in purchasing or procurement policies.
2.2.8	Indicator	2.2.7	Indicator
	The BP 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).		The Organisation has implemented appropriate control systems and procedures for verifying that:
			There is controlled and appropriate use of chemicals, and that Integrated pes management (IPM) is implemented wherever possible in operations.
	Examples of Means of Verification		[Means of Verification moved to S2 and new standalone document]
	Existing legislation		
	Level of enforcement		
	Regional Best Management Practices		
	Supply contracts		
	Records of BPs' field inspections		
	Monitoring records		
	Interviews with staff		
	Regional, publicly available data from a credible third party		
	The existence of a strong legal framework in the region		
	Guidance		Guidance
	The requirement relates to current and ongoing use rather than historic use.		The requirement relates to current and ongoing use rather than historic use.
	If chemicals are used, proper equipment and training should be provided to minimise health and environmental risks. Chemical use should be justified, and there should be evidence that non-chemical alternatives have been considered. The use of class 1A and 1B pesticides, as drafted by the World		If chemicals are used, proper equipment and training should be provided to minimise health and environmental risks.

	Health Organisation, and of chlorinated hydrocarbons is not permitted. There should be evidence that the options for implementing IPM have been considered and, where appropriate, IPM is implemented. BPs may require suppliers and forest owners to adopt specific Best Management Practices and to be certified for certain tasks. These should be specified in purchasing or procurement policies.		Chemical use should be justified, and there should be evidence that non-chemical alternatives have been considered. The use of class 1A and 1B pesticides, as drafted by the World Health Organisation, and of chlorinated hydrocarbons is not permitted. There should be evidence that the options for implementing IPM have been considered and, where appropriate, IPM is implemented. Organisations may require suppliers and forest owners to adopt specific Best Management Practices and to be certified for certain tasks. These should be specified in purchasing or procurement policies.
2.2.9	Indicator	2.2.8	Indicator
	The BP has implemented appropriate control systems and procedures for verifying that methods of waste disposal minimise negative impacts on forest ecosystems (CPET S5d).		The Organisation has implemented appropriate control systems and procedures for verifying that: Methods of waste disposal minimise negative impacts on forest ecosystems.
	Examples of Means of Verification		[Means of Verification moved to S2 and new standalone document]
	Regional Best Management Practices		
	Supply contracts		
	 Operational Assessment of potential impacts and of measures to minimise impact 		
	Monitoring results		
	Guidance Waste is defined as any substance or object that the holder discards or intends to discard or is required to discard. References sources include: 2008 Waste Framework Directive (Directive 2008/98/EC)		[Moved to Glossary of Definitions]
			Sources of information include
			European Commission: (2008) Waste Framework Directive (Directive 2008/98/EC):

			https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32008L0098
2.3.1	Indicator	2.2.9	Indicator
	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.		 The Organisation has undertaken analysis to show that Feedstock harvesting: Does not exceed the long-term production capacity of the forest Avoids significant negative impacts on productivity and Ensures long-term economic viability Harvest levels are justified by inventory and growth data
	 Examples of Means of Verification Harvesting records, inventory and growth data and yield calculations demonstrate that biomass feedstock harvesting rates are not having significant negative impacts on forest productivity and long-term economic viability 		[Means of Verification moved to S2 and new standalone document]
	Documentation of Operational Practice		
	Guidance		Guidance
	Evaluation must cover the entire Supply Base, and where appropriate, should be based on regional markers, such as growth/drain, inventory, mortality, and age class distribution.		Evaluation must cover the entire Supply Base, and where appropriate, should be based on regional markers, such as growth/drain, inventory, mortality, and age class distribution.
			This indicator also has impacts on forest carbon. (Link to FC Principle 3)
2.4.1	Indicator	2.2.10	Indicator
	The BP has implemented appropriate control systems and procedures for verifying that the health, vitality and other services provided by forest		The Organisation has implemented appropriate control systems and procedures for verifying that:
	ecosystems are maintained or improved (CPET S7a).		The health, vitality and other services provided by forest and other ecosystems in the Supply Base are maintained or enhanced.
	Examples of Means of Verification		[Means of Verification moved to S2 and new standalone document]
	 Overall evaluation of potential impacts of operations on forest ecosystem health and vitality 		



- Assessment of potential impacts at operational level and of measures to minimise impacts
- Regional Best Management Practices
- Supply contracts
- Monitoring results

Guidance

Health and vitality of the forest ecosystem relate to the resilience of the ecosystem to withstand change. Indicators of health and vitality may include the level of disturbance observed, changes in biodiversity, or the presence or absence of key 'indicator' species.

Relevant ecological functions and values may include:

- Forest regeneration and succession
- Genetic, species and community diversity
- Natural cycles affecting productivity of the forest ecosystem

There are other forest services, not specifically covered elsewhere in this standard, which indicate forest health and vitality.

These include functions that forests provide for people and/or the environment, such as:

- Erosion control
- Flood control

Indicator

2.4.2

• Adequate access for recreation, where possible.

There should be ongoing maintenance and improvement for other forest services provided, such as access for recreation.

Guidance

Health and vitality of the forest and other ecosystems relate to the resilience of the ecosystem to withstand change.

Indicators of health and vitality may include the level of disturbance observed, changes in biodiversity, or the presence or absence of key 'indicator' species. (see Criterion 2.1 Biodiversity).

Relevant ecological functions and values may include:

- Forest and tree regeneration and succession
- Genetic, species and community diversity
- Threat and/or presence and spread of invasive, non-native species
- Natural cycles affecting productivity of the forest or other ecosystem

There are other forest services, not specifically covered elsewhere in this standard, which indicate ecosystem health and vitality.

These include functions that ecosystems provide for people and/or the environment, such as:

- Erosion control
- Flood control
- Adequate access for recreation, where possible.

There should be ongoing maintenance and improvement for other forest services provided, such as access for recreation.

2.2.11 Indicator

The BP has implemented appropriate control systems and procedures for verifying that natural processes, such as fires, pests and diseases are managed appropriately (CPET S7b).	The Organisation has implemented appropriate control systems and procedures for verifying that: Natural processes, such as fires, pests and diseases are managed appropriately.
Examples of Means of Verification	[Means of Verification moved to S2 and new standalone document]
Regional Best Management Practices	
Supply contracts	
Assessment of potential impacts at operational level and of measures to minimise impacts	
Monitoring results	
Regional, publicly available data from a credible third party	
The existence of a strong legal framework in the region	
Guidance	Guidance
Appropriate management of such situations will depend upon the forest type, management objectives and local best practice and guidance.	Appropriate management of such situations will depend upon the forest and other land type, management objectives and local best practice and guidance.
Fire, for example, may be an appropriate and necessary natural process in some forest types and seasons, and inappropriate in others. Where they	Fire, for example, may be an appropriate and necessary natural process in some areas and seasons, and inappropriate in others.
are natural and necessary, the characteristics of any fire control interventions will be different to those taking place in forests where fire is not naturally part of their ecology.	Where they are natural and necessary, the characteristics of any fire control interventions will be different to those taking place in areas where fire is not naturally part of their ecology.
Pests and diseases also need to be managed appropriately, and this will vary according to management objectives. In	Pests and diseases also need to be managed appropriately, and this will vary according to management objectives.
conservation areas, for example, it may not always be appropriate to attempt eradication of certain pests and diseases.	In conservation areas, for example, it may not always be appropriate to attempt eradication of certain pests and diseases.
Where pesticides and other chemicals are used to address pests and diseases, regional and other best management practices must be adhered to.	Where pesticides and other chemicals are used to address pests and diseases, regional and other best management practices must be adhered to.
Control systems and procedures should, define appropriate management practice for the particular forest type and region.	Control systems and procedures should, define appropriate management practice for the particular land type and region.



2.10.	Indicator	2.2.12	Indicator
1	Genetically modified trees are not used.		Genetically modified trees are not used.
	Examples of Means of Verification		[Means of Verification moved to S2 and new standalone document]
	 Reference sources, interviews and records concerning use of genetically modified trees 		
	Regional, publicly available data from a credible third party		
	The existence of a strong legal		
	framework in the region		
	Genetically modified trees are those in which the genetic material has been altered in a way that does not occur naturally by pollination and/or natural recombination, taking into account applicable legislation providing a specific definition of genetically modified organisms. Reference sources include: <u>http://www.globalforestregistry.org/</u>		
			Sources of information include
			Preferred by Nature Sourcing Hub: <u>https://preferredbynature.org/sourcinghub</u>
			FSC Risk assessment platform: https://fsc.org/en/fsc-risk-assessment-platform