

Green Gold Label Standard GGLS2 Agricultural source criteria

Requirements for the sourcing of
agricultural biomass



Standard GGLS2

Agricultural source criteria

Version 3-1

Valid from 2 March 2026 (Adoption date)

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Document navigation

This document is part of the Standards from the Overall documents. It concerns Standard 2 of the GGL scheme and applies to all regulatory frameworks.

The Overall documents comprise the GGL Setup and Governance, GGL Standards and GGL Operating documents. Additionally, the GGL scheme offers Instructions and Guidances for specific regulatory frameworks (RED, FIT/FIP, SDE+/++), which can supersede clauses in the Overall documents. This applies only when explicitly stated in the relevant Instructions and Guidances.

Refer to the **GGL Document Structure** (as part of the GGL Setup and Governance documents) for more detailed information on navigating and interpreting GGL documentation.

GGL Setup and Governance <ul style="list-style-type: none"> Articles of association GGL foundation GGL Document structure GGL Regulation GGL Scope definitions GGL CB agreements GGL Partner Code of Conduct GGL Operating Agreement 	GGL Standards <ul style="list-style-type: none"> GGLS1 – Chain of custody criteria GGLS2 – Agricultural source criteria GGLS4 – Transaction and Product Certificate GGLS5 – Forest management criteria GGLS6 – Power company criteria 	RED – Instructions <ul style="list-style-type: none"> Instruction A.0 – RED Module Instruction A.1 – RED Reporting duties Instruction A.2 – RED Internal monitoring Instruction A.3 – RED Auditor requirements Instruction A.4 – RED GHG emissions Instruction A.5 – RED Additional Agricultural source and Forest management criteria Instruction A.6 – RED Supplier verification programme for biogenic residues and waste 	RED – Guidances <ul style="list-style-type: none"> Guidance A.0.i – RED Raw materials statement template Guidance A.0.ii – RED Transaction certificate template Guidance A.0.iii – RED Audit template Guidance A.4.iv – RED GHG default values Guidance A.5.v – RED Level A Risk assessments Guidance A.6.vi – RED Supplier verification checklist for biogenic residues and waste 	GHG Guidance <ul style="list-style-type: none"> Guidance ABC.1 – GHG calculator
	GGL Operating documents <ul style="list-style-type: none"> GGL Participant fees GGL Logo and tradename use GGL List of prohibited materials 	FIT / FIP – Instructions <ul style="list-style-type: none"> Instruction B.0 – FIT/FIP Module Instruction B.1 – FIT/FIP Endorsed schemes Instruction B.2 – FIT/FIP GHG emissions Instruction B.3 – FIT/FIP Additional power company criteria 	FIT / FIP – Guidances <ul style="list-style-type: none"> Guidance B.0.i – FIT/FIP Raw materials statement template Guidance B.0.ii – FIT/FIP Transaction certificate template Guidance B.0.iii – FIT/FIP Audit template Guidance B.0.iv – FIT/FIP Supplier verification checklist for biogenic residues and waste Guidance B.2.v – FIT/FIP LCGHG default values 	
		SDE++ – Instructions <ul style="list-style-type: none"> Instruction C.1 – SDE++ Endorsed schemes Instruction C.2 – SDE++ GHG emissions 	SDE++ – Guidances <ul style="list-style-type: none"> Guidance C.0.i – SDE++ Raw materials statement template Guidance C.0.ii – SDE++ Transaction certificate template 	

The GGL standards are applicable as per the indicative illustration i below.

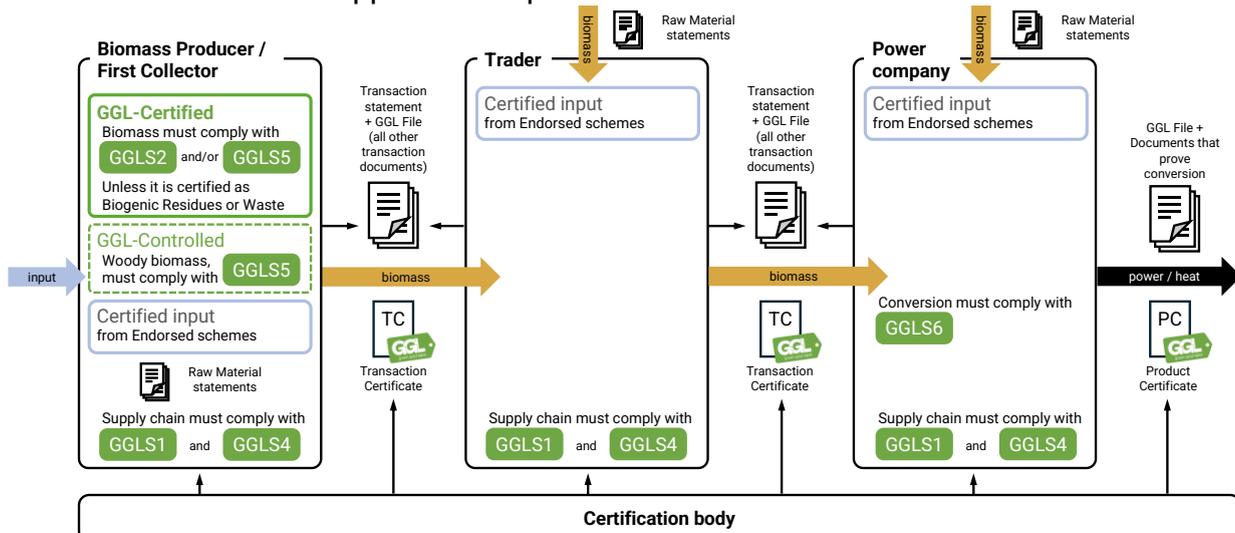


Illustration i – Applicability of GGL Standards



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Changes and transitioning

This section lists the key changes in this version v3-1 from version **GGLS2 - Agricultural Source Criteria – Version 2-3 (December 2018)**:

No.	Change type	Section reference	Details of change
1	Content	Section A	Included allocation logic for GGL Categories of biomass
2	Content	Principles	Principles regrouped for simplified structure
3	Content	Principles	Removed requirements relating to cross-compliance (no longer applicable)
4	Content	Principle 1	Strengthened requirements related to supporting land tenure for smallholders
5	Content	Principle 7	Strengthened requirements relating to land with high biodiversity value
6	Content	Principle 8	Strengthened requirements relating to land with high carbon stock
7	Content	Principle 7 and Principle 8	Included requirements for evidencing
8	Content	Document navigation	Included document navigation and updated illustration for clarity
9	Text feature	Changes and transitioning	Included the changelog and the transitioning procedure between the previous and the current version
10	Text feature	Glossary	Included glossary
11	Formatting	All	Changed and edited formatting, text and wording for clarity and readability
12	Formatting	All	Converted layout to new templates for GGL Documents



In transitioning to the current version of this document, the following applies to Certification bodies, Participants and Certificates:

Publication date	7 November 2025
Adoption date	For all GGL Modules <u>except</u> the SDE+ Module : <ul style="list-style-type: none">• 2 March 2026
Effective date	For all GGL Modules <u>except</u> the SDE+ Module : <ul style="list-style-type: none">• 1 March 2027
End of Transition period	For all GGL Modules <u>except</u> the SDE+ Module : <ul style="list-style-type: none">• 1 March 2028

To clarify: For GGL Scopes with the **SDE+ Module**, only the previous version of this document can be used and remains effective until further notice.

Glossary

Term	Definition
Adoption date	New (versions of) GGL documents state their Adoption date in the transitioning section. This is the date after which certification against the GGL Scheme and the specific document to which the Adoption date applies, is possible. Certification against previous versions remain valid until the Effective date of such document.
Audit report	The audit report lists all results of the audit process in a written form and shall include a summary report as well as all the observations made by the auditor during the audit process.
Biomass producer	The first participant of the GGL supply chain for woody and agricultural biomass (GGL categories 1, 2, 3 and 4) who produces raw material by harvesting or farming activities for which Raw Materials Statements are delivered. Biomass Producers are comparable to First Collectors in the sense these are the first GGL Participants in a GGL supply chain.
Biomass	Biomass means the biodegradable fraction of products, waste and residues from biological origin from agriculture, including vegetal and animal substances, from forestry and related industries, including fisheries and aquaculture, as well as the biodegradable fraction of waste, including industrial and municipal waste of biological origin.
By-product	A by-product is a secondary product derived from a production process, manufacturing process or chemical reaction, not a waste or residue. A by-product might not be the primary aim of such process but has a significant economic value other than its use as biomass.
Certification Body / CB	An independent third party that evaluates and certifies the certification process. Certification Bodies approved by GGL for 1 or more GGL Scopes, are listed on the GGL website.
Credit system / volume credit system	Volume credit system is a chain of custody approach and mass balance system that allows tracking the net amount of sustainable materials as they move through a system or supply chain and ensures an appropriate allocation of these materials to the finished goods based on auditable bookkeeping. GGL does not allow application of the volume credit system for all types of biomass and for all GGL Scopes. The system deployed by GGL to support mass balance administrations is defined in GGLS1 - Chain of Custody criteria.
Direct origination / [...] originate directly	Biomass in GGL Categories 1, 2, 3 and 4 originate directly during harvesting and / or farming activities, meaning that such biomass originates on the location and at the time when the primary products (e.g., wood, agricultural products) originate.
Effective date	New (versions of) GGL documents state their Effective date. This is the date after which only certification against the GGL Scheme and the specific document to which the Effective date applies, is effective. Certification against previous versions of such document is no longer valid.
FMU / Forest Management Unit	A well defined and demarcated land area, predominantly (i.e., >50%) covered by forests, with planned human intervention in a forest ecosystem to achieve specific goals and objectives.

Term	Definition
GGL Categories	Biomass from 1 of the 5 categories that GGL recognizes being: 1) Woody biomass from large FMU's (> 500 hectares) 2) Woody biomass from small FMU's (< 500 hectares) 3) Residues from natural site and landscape management 4) Agricultural biomass 5) Biogenic residues and waste
GGL Module	These are the Instructions and Guidance documents based on which GGL has been approved and recognized as a Certification scheme under different legal and voluntary frameworks (e.g., RED in Europe, FIT/FIP in Japan).
GGL-Certified	Biomass that has been certified against all applicable GGL criteria, or against a certification scheme other than GGL which has been endorsed & approved by the relevant authorities (e.g., EU for REDII, METI for FIT/FIP) to holds the equivalent status. GGL-Certified biomass meets all criteria for sustainability and legality.
Land-related evidence	Evidence of compliance with the land-related criteria can be provided in different forms, including but not limited to aerial photographs, satellite images, maps, land register entries/databases and site surveys. This evidence can be “positive” or “negative”, for example, compliance with the criterion on “primary forest” could be shown by: - An aerial photograph of the land, showing it to be planted (positive), or - A map of all the primary forests in the region, showing the land to fall outside them (negative)
Normative	Normative elements are those that are prescriptive, that is they are to be followed in order to comply with scheme requirements.
Old growth forest	Old growth forest refers to natural forest ecosystems that have developed over long periods of time (typically centuries) without significant disturbance or human intervention and that exhibit unique ecological features such as large and old trees, multilayered canopies, rich structural diversity, high levels of biodiversity, and the presence of deadwood.
Participant / GGL Participant	Economic operator that has been certified under GGL per GGL Regulation Section G or against a certification scheme other than GGL which has been endorsed & approved by the relevant authorities (e.g., EU for REDII, METI for FIT/FIP) to hold the equivalent status, such as forest and agricultural biomass producers, waste and residue producers, first gathering points, collectors, suppliers, traders, processing plants and conversion plants (end-users).
Peatland	Peatlands, generally also known as bogs, mires, or moors, are unique wetland ecosystems characterized by the accumulation of partially decomposed plant material - peat.
Point of origin	The location where the raw material is originally generated.
Processing	This relates to activities that change the physical or chemical characteristics of the biomass material. For instance, chipping, drying and pelletisation change the density or heating value of the material, while digestion or pyrolysis change the chemical characteristics.

Term	Definition
Publication date	New (versions of) GGL documents state their Publication date. This is the date at which that version is published. Certification against the new version of such document is not possible until after its Adoption date.
RED	EU Renewable Energy Directive (EU) 2018/2001 (REDII) and amended by Directive (EU) Directive 2023/2413 (REDIII), most recent consolidated version (including amendments and corrections) as published on https://eur-lex.europa.eu
Residue	Residue means a substance that is not the end product(s) that a production process directly seeks to produce; it is not a primary aim of the production process and the process has not been deliberately modified to produce it.
Site	Site means a geographical location, logistical facilities, transmission or distribution infrastructures with precise boundaries within which products can be mixed.
Transition period	New (versions of) GGL documents state their Transition period. This is the period within which (re-)certification decisions taken prior to the Effective date against the previous version of the current document, remain valid. Initial audits, renewal audits and surveillance audits by a Certification Body during the Transition period shall only take place against the current version of the GGL Scheme document to which the Transition period applies.
Waste	Waste is a substance or an object which the holder discards or intends or is required to discard, that is not considered a by-product, and excludes substances that have been intentionally modified or contaminated in order to meet this definition.

A. Introduction

A.1

GGLS2 – Agricultural source criteria is based on the United Nations sustainable development program Agenda 21 and the sustainability criteria from the RED (EU Renewable Energy Directive). This standard can be applied independently to raw materials sourced within the scope of a GGL Participant’s certificate to verify compliance against the criteria for responsibly managed, sustainable forestry. A verification based on the principles of this standard, with a positive result, will lead to the source being accepted as input under the GGL scheme requirements.

The requirements for verifying products entering GGL supply chains against this standard are described in Principle 5 of **GGLS1 – Chain of Custody criteria**. This standard has a global scope and encompasses sourcing of biomass at the beginning of the GGL supply chain.

A.2

Material that directly originates from agricultural activities can be GGL Category 4 biomass if it meets the requirements for its GGL Scope, as defined in **GGL Scope definitions**. The decision process for allocating input material is shown in Figure ii below.

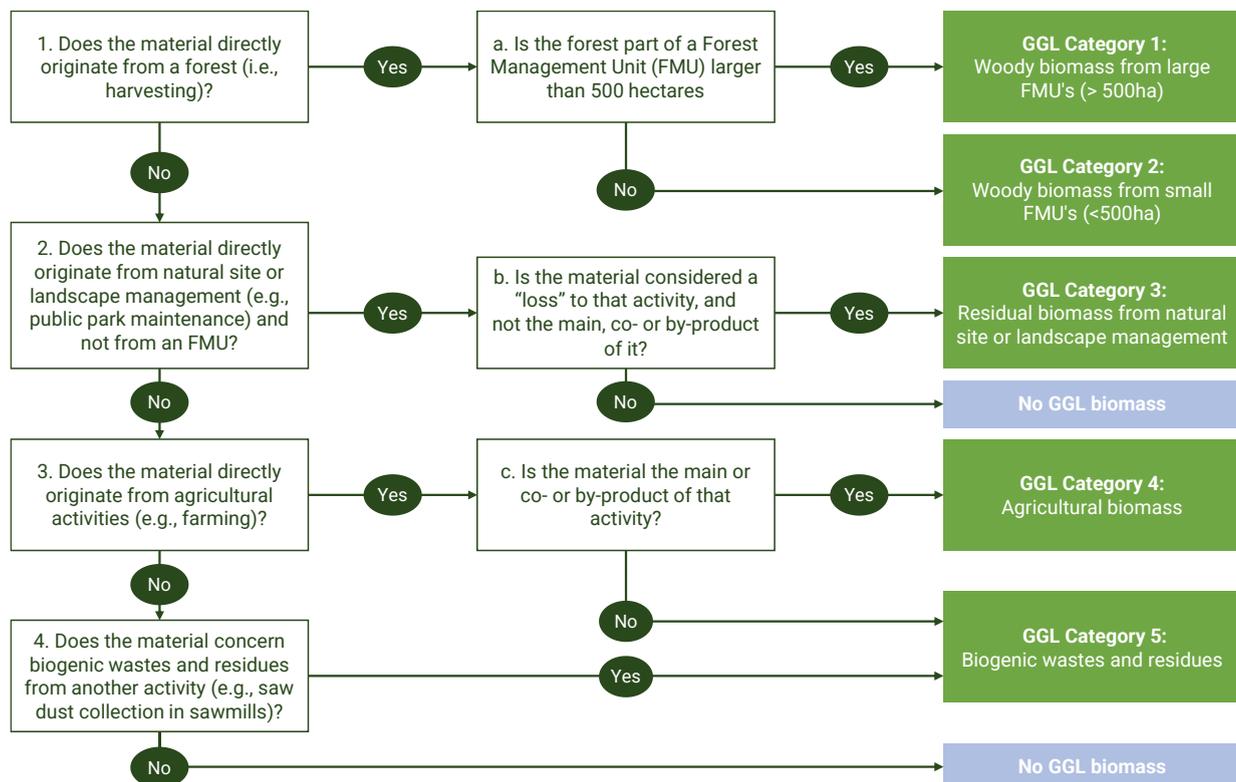


Figure ii – Allocation logic for biomass to a GGL Category

A.3

This standard offers 2 options for Biomass producers when sourcing biomass in GGL Category 4:



1. Individual verification (option 1); or
2. Verification of groups or regional associations (option 2).

In all cases, the Biomass producer (as a GGL Participant) is responsible for applying to a Certification Body to include any of the options mentioned above in the scope of its GGL certification.

A.4

Verification and auditing requirements for options described under A.3 are as follows:

- A.4.1 For option 1 (Individual verification), the Certification Body shall conduct onsite audits at all agricultural sites included in the scope. In this case, the Biomass producer (as GGL Participant) is not required to conduct its own onsite verification at each site.
- A.4.2 The above requirement (A.4.1) does not apply to option 2 (groups or regional associations), in which case the Biomass producer shall be responsible for ensuring that onsite verification audits are carried out as stipulated in this Standard as well as Principles 5.12 and 5.13 from **GGLS1 – Chain of custody criteria** and Certification Bodies shall conduct onsite audits per **GGL Regulation** section including sections E, G and H.

A.5

All GGL Standards are normative unless stated otherwise.

B. Principles

Principle 1. The agricultural management system is part of an integrated long-term planning program, aimed at development and sustainability

- 1.01 The Biomass Producer makes a long-term commitment to adhere to the principles and criteria for sustainable agriculture, as expressed in a written, up-to-date agricultural management plan or other management documents.
- 1.02 The Biomass Producer has full legal right to use the land, evidenced by the following:
 - 1.02(a) Valid documents proving ownership, lease, or customary use rights are available. If formal documents aren't available (as in many rural areas), the farm/group must show legitimate, uncontested rights recognised by local authorities or communities;
 - 1.02(b) Land is not under dispute or taken from others without consent; and,
 - 1.02(c) Expansion of production areas does not cause land conflicts.
- 1.03 Biomass Producer shall implement policies to positively influence land tenure (e.g., usage rights, property rights and transfer rights) of local smallholders with whom they compete and/or cooperate. Policy reviews are carried out periodically.

Note - With this policy, the Biomass Producer helps address the frequent insecurity of smallholders' land tenure, which impacts their ability to invest in long-term agricultural practices and secure their livelihoods.

- 1.04 The management plan addresses the policy for improving sustainable production, harvesting, storage, processing, distribution, and marketing of products at the local, national, and regional levels, with clear, measurable indicators. The management plan identifies and addresses storage and distribution issues that impact food distribution and security.

Principle 2. The agricultural management system is based on land resource planning.

- 2.01 Continuous monitoring and data collection on the utilisation of natural resources and living conditions are used for land resource planning (whether conducted individually or at the regional level by a Group manager). At least the following data are collected regularly:
 - Climatological developments,
 - water and soil quality,
 - land use,
 - vegetation cover and distribution,
 - animal species and diversity,
 - utilisation of wild plants and diversity,
 - use of different production systems and their yields, costs and prices, and
 - social and cultural considerations affecting agriculture and adjacent land use.
- 2.02 The Biomass Producer participates in land resource planning initiatives at

district- and village levels, to which his agricultural sites belong, assisted by local authorities and conservation groups as necessary.

Principle 3. The agricultural management is aimed at land conservation and rehabilitation

- 3.01 Land degradation is systematically and regularly surveyed.
- 3.02 Land and conservation areas at risk are identified, and the policy and management measures are formulated.
- 3.03 The general planning, management, and utilisation of land resources, along with the preservation of soil fertility, are defined and implemented.

Principle 4. The agricultural management aims to ensure the supply and quality of freshwater for sustainable food production and sustainable rural development

- 4.01 The efficiency and productivity of agricultural water use must increase over time to better utilise limited water resources.
- 4.02 A data collection and monitoring system is in place and covers at least:
 - Irrigation performance,
 - Biological, physical and chemical water quality
- 4.03 Sewage and waste from farms and human settlements, along with manure produced by intensive livestock breeding, are disposed of properly to minimise adverse impacts on freshwater supply and availability.
- 4.04 Measures must be taken to minimise soil runoff and sedimentation.
- 4.05 Irrigation has to be planned as part of a long-term program.
- 4.06 Long-term strategies and implementation programs have to be developed for water use under scarce conditions.
- 4.07 Wastewater reuse has to be part of the agricultural management system.

Principle 5. The agricultural management system has implemented integrated pest management and control

- 5.01 Pest management and control are integrated into the management system.
- 5.02 The use of banned pesticides is prohibited.
- 5.03 The use of restricted pesticides is controlled, and the administration is kept up to date. Stocks of restricted pesticides are kept in a separate, locked storage area.
- 5.04 Biological control agents, organic pesticides, and traditional knowledge and skills for alternative non-chemical pest control must be identified and implemented in the agricultural management system.

Principle 6. The agricultural management system has implemented sustainable plant nutrition

- 6.01 The management plan is based on an integrated plant nutrition approach intended to enhance agricultural efficiency and increase food and feed production.
- 6.02 The availability of fertilisers and other plant nutrient resources is optimised.

Principle 7. Raw materials shall not be sourced from land that has, or has recently had, a high biodiversity value

- 7.01 Land-related evidence shall demonstrate that raw materials comply with this standard.
- 7.02 The raw material is not produced on land that has held one of the following statuses in or after January 2008, regardless of whether the land still holds that status:
- 7.02(a) Primary forest and other wooded land, namely forest and other wooded land containing native tree species without a clearly visible indication of human activity, where the ecological processes are not significantly disturbed;
 - 7.02(b) Old-growth forest, as defined in the country where it is located;
 - 7.02(c) Highly biodiverse forest and other wooded land that is rich in species, not degraded, and identified as being highly biodiverse by the relevant competent authority, unless land-related evidence is provided that the production of that raw material did not interfere with those nature protection purposes.
 - 7.02(d) Areas designated by law or the relevant competent authority for nature conservation. The cultivation of biomass in the aforementioned areas is permitted on the condition that land-related evidence is provided to demonstrate that the production did not interfere with those nature conservation purposes.
- 7.03 The raw material is not sourced from highly biodiverse grasslands that had one of the following statuses in or after January 2008, irrespective of whether the land still holds that status or not:
- a) Natural grassland, namely grassland that would remain grassland in the absence of human intervention and which maintains the natural species composition and ecological characteristics and processes.
 - b) Non-natural grassland, namely grassland that would cease to be grassland in the absence of human intervention and which is rich in species, and not degraded, unless there is land-related evidence indicating that harvesting of raw materials is necessary to preserve its grassland status.
- 7.04 The raw material is not produced on heathland or land that held such status in or after January 2008. Heathland is defined by poor, acid soil dominated by ling (Calluna) or heaths (Erica).

Principle 8. Raw materials shall not be obtained from land that has, or has recently had, a high carbon stock

- 8.01 Biomass is not sourced from lands that had one of the following statuses in January 2008 and no longer hold that status:
- a) Wetlands namely land that is covered with or saturated by water permanently or for a significant part of the year. Land-related verification evidence should reflect seasonal changes.
 - b) Continuously forested areas, namely land spanning more than one hectare with trees higher than five metres and with a canopy cover of more than 30%, or trees able to reach those thresholds in situ. This definition includes areas identified as such under the respective national legal definitions, but

excludes land predominantly under agricultural use. In this context, agricultural land use refers to tree stands in agricultural production systems, such as fruit tree plantations, oil palm plantations and agroforestry systems where crops are cultivated under tree cover.

- 8.02 Forested areas with 10-30% canopy cover for the applicability of Principle 8.01, refer to land spanning more than one hectare with trees higher than five metres and a canopy cover of between 10% and 30%, or trees able to reach these thresholds in situ.
- 8.03 The provisions of Principle 8.01 shall not apply if, at the time the raw material was obtained, the land retained the same status as it did in January 2008.
- 8.04 Raw material shall not be sourced from land that was peatland, namely land largely consisting of peat or peat bogs on 1 January 2008, unless it can be demonstrated by providing land-related evidence that the production and harvesting of that raw material do not involve the drainage of previously undrained soil.

Principle 9. Soil quality shall be maintained and, where possible, improved

- 9.01 Best practices are implemented to maintain and improve soil quality, in line with production or management objectives incorporated into a management plan. This implies that:
- 9.01(a) The Biomass producer receiving the material shall demonstrate that the original supply unit has a policy or plan in place to maintain (and, where possible, improve) soil quality, based on local best practices. If relevant, this plan shall include at least:
- key objectives of soil management;
 - measures to prevent erosion;
 - maintenance of the soil nutrient balance (nitrogen, phosphorus, potassium);
 - maintenance of soil organic matter and soil fertility, structure and salinity.
- 9.01(b) Each Biomass Producer shall retain relevant information (e.g. reports from the Point of Origin, audit reports, monitoring data) to demonstrate that the plan or policy has been implemented.