2BS voluntary scheme

REQUIREMENTS FOR
THE VERIFICATION OF BIOMASS PRODUCTION

“First gathering entity”
(Agriculture biomass producers)

“Collection point”
(Wastes and residues producers)

Note on the status of this document

This reference document is an integral part of the 2BS voluntary scheme developed by the 2BS Association.

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Introduction

The 2BS voluntary scheme has been developed to allow biomass producers, wastes and residues originators, 1\textsuperscript{st} gathering entities, collection sites, manufacturers, traders and all other involved actors along the biofuels supply chain (globally named in this introduction: “economic operators”) to demonstrate the sustainability of their products in conformity with the European Union Directive 2009/28/EC modified by the Directive 2015/1513.

The 2BS voluntary scheme has been designed to cover all the requirements of the EU Directive 2009/28/EC modified by the Directive 2015/1513 and related EC Communication, by:

- Covering all the sustainability criteria of the EU Directive 2009/28/EC modified by the Directive 2015/1513 (GHG emission savings, land with high biodiversity values, highly biodiverse grassland\(^1\), land with high carbon stocks, peat land).

- Ensuring that “economic operators” provide accurate and reliable information regarding the origin of the biomass and/or biofuels in conformity with the sustainability criteria of the EU Directive 2009/28/EC modified by the Directive 2015/1513.

- Ensuring independent auditing of the systems used by “economic operators” to verify that they are accurate, reliable and protected against fraud.

- Ensuring that “economic operators” participating in the Scheme have an auditable system in conformity with points 2 & 5.2 of Module D1 of Annex II of the Decision on a Common Framework for the Marketing of Products, and have accepted the responsibility for preparing any information related to the auditing of such evidence.

- Ensuring that the “economic operators” use an appropriate mass balance system in conformity with the EU Directive 2009/28/EC modified by the Directive 2015/1513 article 18.1.

- Ensuring that “economic operators” use an appropriate system for GHG calculations in conformity with the Directive 2009/28/EC modified by the Directive 2015/1513 article 19 and Annex V.

The Requirements for the verification of Biomass Production contained in this document have been designed to cover the biomass producers /1\textsuperscript{st} gathering entity and collection point / wastes and residues producers and any related commercial transaction between these entities, and to have adequate levels of reliability, transparency and independent auditing. Auditing by an independent verification body ensures that the systems covered by the scope of the certificate are reliable and protected against fraud in conformity with

\(^1\) Article (1), of the Commission Regulation (EU) N\textsuperscript{0} 1307/2014 of the 8\textsuperscript{th} of December 2014

These requirements shall be applied to verify the conformity of the biomass producers /1st gathering entity, and associated 1st commercial transactions within the group certification unit as defined by the 1st gathering entity (see diagram below).
To avoid an excessive burden for operators in general, the 1st gathering entity acts as a group manager and is responsible for defining the scope of the certification unit and shall identify and specify the biomass producers, collection and storage sites covered by the certification unit for which the 1st gathering entity has developed a quality and group management system designed to demonstrate conformity of the biomass with the sustainability criteria set in the European Directive 2009/28/EC modified by the Directive 2015/1513.

The certification unit for the biomass production and related 1st commercial transactions as defined in the 2BS voluntary scheme shall include the biomass producers as group members and the 1st gathering entity as group manager. Biomass producers included within the scope of the certificate shall be near each other and share similar characteristics.

Biomass means the biodegradable fraction of products, waste and residues from biological origin from agriculture (including vegetal and animal substances), forestry and related industries including fisheries and aquaculture, as well as the biodegradable fraction of industrial and municipal waste.

With regard to collection sites / wastes and residues producers, Principles 3 to 6 are not applicable but the notions of group members for wastes and residues originators and group manager for the collection point remain appropriate in certain situations like those of “Used Cooking Oil: UCO collectors” and restaurants.

Processing 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.

Agricultural, aquaculture, fisheries and forestry residues means residues that are directly generated by agriculture, aquaculture, fisheries and forestry; they do not include residues from related industries or processing.

Waste means any substance or object, which the holder discards or intends or is required to discard. Definitions of waste key concepts and management plans are available in the Directive 2008/98/EC of 19 November 2008.

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2 For more details, see Procedure: 2BS-PRO-04 “Extension of requirements for the production of biofuels, biogas and bioliquids from wastes and residues”.
Ligno-cellulosic material means material composed of lignin, cellulose and hemicellulose such as biomass sourced from forests, woody energy crops and forest-based industries' residues and wastes.

Non-food cellulosic material means feedstocks mainly composed of cellulose and hemicellulose, and having a lower lignin content than ligno-cellulosic material; it includes food and feed crop residues (such as straw, stover, husks and shells), grassy energy crops with a low starch content (such as ryegrass, switchgrass, miscanthus, giant cane and cover crops before and after main crops), industrial residues (including from food and feed crops after vegetal oils, sugars, starches and protein have been extracted), and material from bio-waste.

Wastes, agricultural crop residues, including straw, bagasse, husks, cobs and nut shells, and residues from processing, including crude glycerine (glycerine that is not refined), shall be considered to have zero life-cycle greenhouse gas emissions up to the process of collection of those materials.

The expression “sustainability characteristics” is often used in this document. It encompasses the qualitative sustainable criteria – the origin and or land use where the biomass has been cultivated.

The expression “GHG characteristics” encompasses the quantitative sustainable criteria – the GHG emissions related to the production of the biomass and the biofuels.

The verification requirements set out in this document apply to the first gathering entity, biomass producers and/or collection sites of wastes and residues. However, demonstration of conformity with these requirements shall not affect, replace or impact their respective individual technical, commercial or legal responsibilities.

This document is an integral part of the 2BS voluntary scheme developed to evaluate the sustainability of biofuels and shall not be used to evaluate 1st gathering entities, collection sites and their related biofuels producers without implementing all the relevant procedures and requirements of the 2BS voluntary scheme.

**Transition rules**

For economic operators with active 2BS certificates on 31 August 2016, all audits (initial certification, renewals and surveillances audits) conducted from 1st January 2018 must be to the new version of the scheme. Not implementing this requirement would result in the suspension of the 2BS certificate of the operator.

Operators who will be certified under 2BS for the first time from January 1, 2017 will be required to comply directly with this version requirements of this standard (2BS-STD 01, version….) and associated procedures.
**Scope of the Requirements of 2BS-STD-01**
Requirements may be applicable to the 1st gathering entity (agricultural biomass), the collection point (wastes and residues) or both.

**Principle 0: Internal management and monitoring system**
The 1st gathering entity / collection point **shall** have available up-to-date records of accurate data concerning the sustainability criteria and all information required to demonstrate conformity with the EU Directive 2009/28/EC modified by the Directive 2015/1513.

**Criterion 0.1:** The 1st gathering entity / collection point **shall** have access to relevant and detailed information regarding the origin (country of origin and supplier) of the biomass and may perform a risk analysis and assessment.

**Indicator 0.1.1:** The 1st gathering entity **shall** define the data, documents and/or records needed for its suppliers of biomass covered by the certification unit to demonstrate that the biomass is in conformity with the European Directive and that the biomass can be considered as sustainable. Such evidence shall be based on relevant official records, official land registry data or documents that can be independently verified.
- **Verifier:** List of official data, documents land registry and/or records, or
- **Verifier:** List of official documents currently in use.
**Indicator 0.1.2 (Major Indicator):** The 1st gathering entity shall establish a list of all its suppliers of biomass claiming sustainability with the approximate localization of the production area. Biomass producers included within the scope of the certificate shall be near each other and share similar characteristics. Each collection point shall establish a list with exact addresses of wastes and residues originators. These lists shall be kept as part of the records of the entity and shall be reviewed and updated at least once a year.

- **Verifier:** For 1st gathering entity & collection point ⇒ Detailed list of suppliers with - for each supplier- the name, address, and main characteristics (location, type of feedstock cultivated, etc.) or

- **Verifier:** For 1st gathering entity ⇒ Detailed list of suppliers with - for each supplier - the geographical location of the production area with for example the geographical coordinate as a reference (e.g. One central point with an estimate of the production area from this central point, or coordinates of the extreme points of the area of production or precise coordinate of the production area) and main characteristics (location, type of feedstock cultivated, etc.).

**Indicator 0.1.3:** The 1st gathering entity / collection point shall have a declaration, questionnaire, form or other document signed every year at least by all its suppliers of biomass demonstrating their commitment to ensure that the biomass declared as sustainable has been produced in compliance with the requirements of the European Directive. The form used for this declaration may take different forms but shall contain an explicit statement regarding the sustainability requirements with which to comply and a requirement to inform the 1st gathering entity / collection point of any possible change whenever it may occur.

- **Verifier:** Signed Scheme Declaration Form, or
- **Verifier:** Contract with appropriate clause, or
- **Verifier:** Amendment to existing contract, or
- **Verifier:** Other questionnaire or form used during site visits by 1st gathering entity / collection point.

**Indicator 0.1.4:** The 1st gathering entity shall have identified and recorded the origin and country of origin of the biomass through the suppliers’ declarations. This can be done based on the address declared by the supplier or relevant coordinates.

- **Verifier:** Location of the suppliers of biomass, country of origin, NUTS 2 region, or
- **Verifier:** Land registry document, or
- **Verifier:** Geographical coordinates, or
- **Verifier:** Have access to Reference Map of Agricultural Plots.

**Criterion 0.2:** The 1st gathering entity / collection point shall have received and/or recorded relevant and detailed information regarding the type and volume of biomass supplied, including any sustainability and GHG characteristics.

(Note: This Criterion 0.2 needs to be audited within the context of the requirements defined in other Criteria under Principle 1 below).
**Indicator 0.2.1:** The 1st gathering entity / collection point **shall** have implemented a procedure to record all the information, data and documents required to receive and classify biomass as sustainable. All records **shall** be kept for **five (5) years**.

- **Verifier:** Documented procedure
- **Verifier:** Evidence that procedure has been implemented
- **Verifier:** List with information required.

**Indicator 0.2.2 (Major Indicator):** The 1st gathering entity / collection point **shall** have records of all relevant information for each batch, consignment and/or volume of the potentially sustainable biomass that it has received. These records shall be available for independent auditors for review at any time.

- **Verifier:** Records including the name and address of the producer (upstream interface) for every quantity and type of biomass, or a certificate number of a recognised voluntary scheme
- **Verifier:** GHG characteristics:
  - If the (disaggregated) default value is used, the value must not be specifically stated. Therefore, it is the responsibility of downstream operators to include information concerning the (disaggregated) default GHG emission values for the final biofuels when reporting to the Member States;
  - If actual value is used, the GHG emissions produced shall be an absolute value (cumulative across all upstream operations) in the unit KgCO$_{2eq}$/dry-ton of incoming sustainable biomass for individual calculation;
  - NUTS 2 values may be applied as an alternative to actual values provided these are available in the unit KgCO$_{2eq}$/dry-ton of feedstock on the Commission web site.

**Criterion 0.3:** The 1st gathering entity / collection point **shall** develop and implement a quality and monitoring system to monitor the biomass producers covered by the scope of the certificate and ensure that all information regarding biomass is accurate, reliable and trustworthy. This information should be monitored by the 1st gathering entity / collection point to ensure it is accurate and reliable through internal monitoring and verification activities.

**Indicator 0.3.1:** The 1st gathering entity / collection point **shall** appoint a manager responsible for the implementation of the monitoring system, including all internal monitoring activities.

- **Verifier:** Terms of reference of the manager with explicit responsibilities and powers with regard to the sustainability characteristics of the biomass.
- **Verifier:** Designated manager to be interviewed by an independent auditor.
**Indicator 0.3.2:** The 1st gathering entity / collection point **shall** identify and establish a list of the information, data and documents that need to be checked during monitoring activities of the biomass producers. The system of the 1st gathering entity / collection point should include written policies, forms and instructions that contain an adequate description of the quality objectives, the organisational structure, the quality control and quality assurance techniques, the monitoring frequency, the quality records such as inspection reports and the means of achieving the monitoring of the required product sustainability criteria.

- **Verifier:** List of information, data and documents to be checked during document review, visits and/or monitoring audits.

**Indicator 0.3.3:** As part of its monitoring activities,

- the 1st gathering entity **shall** ensure that the information provided by suppliers of sustainable biomass recorded in the mass balance is accurate, reliable and trustworthy. Beyond the recording and monitoring of every declaration mentioned in indicator 0.1.3, it shall verify further annually a sample (of at least the square root of the number of group members) of the suppliers of biomass claiming sustainability and keep records of these verifications. During these verifications, the internal auditors of the 1st gathering entity/collections points of wastes and residues should review the declaration form signed by the farmer/waste and residue source responsible at the point of origin and check all relevant documented evidence demonstrating that the declaration is accurate and reliable. Samples of the evidence reviewed may be kept as records of these verifications. When a biomass producer cannot demonstrate conformity with the sustainability requirements, the producer shall be removed from the list of sustainable suppliers.

- the collection point of wastes and residues\(^3\) **shall** audit (this audit can be alternatively physical or desk audit as long as all relevant documents to demonstrate volumes are available and kept by the collection point of wastes and residues) all suppliers of biomass producing raw material resulting in more than 10 tons per month of final good and it must keep records of these verifications. This is mandatory to ensure that the information provided by these specific suppliers of biomass is accurate, reliable and trustworthy. During these verifications, the internal auditors of the collection point should review the declaration form signed by the wastes and residues originator and check all relevant documented evidence demonstrating that the declaration is accurate and reliable. Samples of the evidence reviewed may be kept as records of these verifications. When a biomass producer cannot demonstrate conformity with the sustainability requirements, the producer shall be removed from the list of sustainable suppliers.

- **Verifier:** Verification schedule, or
- **Verifier:** Records of verifications.

**Indicator 0.3.4 (Major Indicator):** The 1st gathering entity / collection point **shall** verify that every new supplier of potentially sustainable biomass before being accepted

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\(^3\) For more details, see Procedure: 2BS-PRO-04 “Extension of requirements for the production of biofuels, biogas and biofuels from wastes and residues” in Chapters 7 & 8.
into a group and added to the initial scope of the certificate awarded submits a declaration as in indicator 0.1.3. In addition, the same procedure as in indicators 0.1.4, 0.3.2 and 0.3.3 respectively should be followed. When a biomass producer cannot demonstrate conformity with the sustainability requirements, the producer shall be removed from the list of sustainable suppliers.

- **Verifier:** List of new suppliers accepted as suppliers of sustainable biomass, and
- **Verifier:** Records of verifications.

**Indicator 0.3.5 (Major Indicator):** The designated manager of the 1st gathering entity / collection point shall perform annual reviews of its internal monitoring system to address potential non-conformities and ensure continuous improvement. Relevant procedures and records shall be checked by the manager and a report written to record the annual review, including the level of conformity of the biomass producers. Such annual review report may be sent to top management for review, action and/or approval.

- **Verifier:** Internal review plan, or
- **Verifier:** Report of internal reviews.

**Criterion 0.4:** The 1st gathering entity shall ensure that all suppliers of biomass covered under the certification unit (i.e. group members) and personnel have received adequate information and/or training as required to implement the system and ensure the sustainable characteristics of the biomass. The 1st gathering entity can choose its own preferred method to inform and train people but records of information and/or training shall be kept.

**Indicator 0.4.1:** The 1st gathering entity shall develop appropriate information and/or training material for all relevant staff members and all its suppliers of biomass claiming sustainability. Such material should be available for review by the independent auditor.

- **Verifier:** Information and/or training material.

**Indicator 0.4.2:** The 1st gathering entity shall develop and implement a plan for training and/or information sessions covering all relevant staff members and all its suppliers of biomass claiming sustainability.

- **Verifier:** Plan for training and/or information sessions, or
- **Verifier:** Interviews with staff members and suppliers, or
- **Verifier:** Evidence of implementation, or
- **Verifier:** List of information and/or training session with date and location, or
- **Verifier:** List of participants for each information and/or training session.
**Criterion 0.4a**: The collection point shall ensure that all “collecting sites” covered under the certification unit and personnel have received adequate information and/or training as required to implement the system and ensure the sustainable characteristics of the biomass. The collection point can choose its own preferred method to inform and train people but records of information and/or training shall be kept.

**Indicator 0.4a.1**: The collection point shall develop appropriate information and/or training material for all relevant staff members and all “collecting sites” claiming sustainability. Such material should be available for review by the independent auditor.

- **Verifier**: Information and/or training material.

**Indicator 0.4a.2**: The collection point shall develop and implement a plan for training and/or information sessions covering all relevant staff members and all its “collecting sites” claiming sustainability.

- **Verifier**: Plan for training and/or information sessions, or
- **Verifier**: Interviews with staff members and suppliers, or
- **Verifier**: Evidence of implementation, or
- **Verifier**: List of information and/or training session with date and location, or
- **Verifier**: List of participants for each information and/or training session.

**Criterion 0.5**: The 1st gathering entity / collection point shall have and maintain relevant up-to-date registers and records covering all requirements included in this document.

**Indicator 0.5.1**: The 1st gathering entity / collection point shall identify and make a list of all documents, information and data that are relevant to demonstrate conformity of producers of biomass with the requirements of the European Directive. Such documented evidence can differ on a case by case basis and needs to be established by the 1st gathering point when the certification unit is defined. The system should contain written policies, procedures and instructions.

- **Verifier**: List of all relevant documents, information and data.

**Indicator 0.5.2**: The 1st gathering entity / collection point shall keep records for each supplier of biomass of the documents, information and/or data that have been identified and listed as relevant to demonstrate conformity with the requirements of the European Directive.

- **Verifier**: Procedure related to record keeping, maintenance and/or document control.
- **Verifier**: Records.

**Indicator 0.5.3**: The 1st gathering entity / collection point shall keep all records for the period of validity of the verification certificate; i.e. five (5) years.

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4 For more details, see Procedure: 2BS-PRO-04 “Extension of requirements for the production of biofuels, biogas and bioliquids from wastes and residues” in Chapters 2 & 7.
• **Verifier:** Procedure related to record keeping, maintenance and/or document control.
• **Verifier:** Records.

**Criterion 0.6:** Any biomass from an unknown country of origin or unclear origin **shall** not be considered and classified as sustainable.

**Indicator 0.6.1:** The 1st gathering entity / collection point **shall** have a procedure to verify that a supplier is in conformity with the requirements of the EU Directive 2009/28/EC modified by the Directive 2015/1513 before classifying as sustainable the biomass originating from this supplier.
  • **Verifier:** Declaration form for biomass producers

**Indicator 0.6.2:** For all suppliers of biomass claiming sustainability that have declared land use changes in the previous year(s), the 1st gathering entity **shall** have recorded the corresponding $\Delta_1$ value (land use change).
  • **Verifier:** List of suppliers of biomass claiming sustainability where land use changes have resulted in carbon emission and carbon stock change.

**Indicator 0.6.3 (Major Indicator):** The 1st gathering entity / collection point **shall** have developed and implemented a procedure to ensure that in case of doubt regarding the origin or country of origin of the biomass, the **principle of caution** is applied and the biomass is not registered and/or claimed as sustainable.
  • **Verifier:** Written procedure, and
  • **Verifier:** Evidence that the procedure has been communicated to all relevant staff, and
  • **Verifier:** Interview with relevant staff to ensure awareness and systematic implementation of the procedure.
Principle 1: Mass Balance System for Biomass

The 1st gathering entity / collection point shall implement a mass balance system in conformity with the EU Directive Article 18, sections 1.a, 1.b and 1.c.

Criterion 1.1: The 1st gathering entity / collection point shall have developed and documented a control system for the biomass received based on a mass balance system at the level of containers, processing logistical facilities or sites (defined as a geographical location with precise boundaries within which products can be mixed) to ensure that “sustainability characteristics” remain assigned to “consignments”, in conformity with the EU Directive 2009/28/EC modified by the Directive 2015/1513.

Indicator 1.1.1 (Critical Indicator): The 1st gathering entity / collection point shall have developed and documented a mass balance system for the potentially sustainable biomass it receives. Such mass balance may be consolidated centrally as long as relevant information for the 1st gathering entity (i.e. inputs and outputs, type of feedstock, volume, country of origin, sustainability characteristics and, GHG characteristics, including whether default, actual or NUTS2 values are used,) or for collection points (i.e. inputs and outputs, type of feedstock including wastes and residues names, categories for animal fat), year of harvest, volume, country of origin, sustainability characteristics and GHG characteristics), is available for each processing or logistical facility, or site.

- Verifier: Set of documented procedures for mass balance system, or
- Verifier: Set of work instructions.

Indicator 1.1.2: The 1st gathering entity / collection point shall have identified, characterised and classified the types of biomass it receives into different categories making reference to the type of feedstock (including wastes and residues), year of harvest, country of origin, sustainability characteristics and all necessary GHG characteristics.

- Verifier: List with categories of biomass defined by type of feedstock, year of harvest, country of origin, sustainability characteristics and GHG characteristics.

Indicator 1.1.3 (Major Indicator): The 1st gathering entity / collection point shall record all information, data and/or documents received that were used to classify the biomass as sustainable. All records shall be kept for a period of five (5) years. These records shall include at least the declaration forms of the suppliers classified as sustainable, the delivery documents and evidence of the monitoring process.

- Verifier: Records kept for a period of five (5) years.

Indicator 1.1.4: The 1st gathering entity / collection point shall ensure that all relevant personnel have received adequate information and/or training as needed to implement the procedures of the mass balance system, centrally and on each logistical site.

Footnote: If more than one legal entity operates on a site then each legal entity is required to operate its own mass balance.
• **Verifier:** Training and/or information records.
• **Verifier:** interview with staff members by independent auditor.

**Criterion 1.2:** The mass balance system developed and implemented by the 1st gathering entity / collection point **shall** comply with the following requirements:

**Indicator 1.2.1 (Major Indicator):** The 1st gathering entity / collection point **shall** develop documented mass balance procedures for biomass, from the delivery of the biomass to the transfer of ownership. These procedures shall cover each processing or logistical facility, or site where potentially sustainable biomass is received. Mass balance procedures should be based on records of inputs: type of feedstock (including wastes and residues names, categories for animal fat), year of harvest\(^6\) and volume, conversion factors if any processing takes place, records of movements between logistical sites if any, records of outputs, country of origin, sustainability characteristics and GHG characteristics.

• **Verifier:** Mass balance / Credit account procedures.

**Indicator 1.2.2 (Major Indicator):** The 1st gathering entity / collection point **shall** check and ensure during reception of the biomass that all relevant documentation, data and/or information is accurate, reliable and trustworthy, and in conformity with the requirements defined in this document. The relevant information should be available in the system and spot checks should be performed and recorded. The 1st gathering entity / collection point shall also ensure that relevant information regarding conformity with the sustainability criteria is available to cover the chain from the biomass producer (including wastes and residues names, categories for animal fat), that the supplier has been registered as sustainable and that the relevant declaration form is signed and available.

• **Verifier:** Mass balance / Credit account procedure specifying that the following information needs to be checked at reception: type of feedstock, year of harvest, volume, country of origin, supplier, sustainability characteristics and GHG characteristics, and
• **Verifier:** Work instruction, or
• **Verifier:** Records, or
• **Verifier:** Interviews with staff members.

**Indicator 1.2.3 (Major Indicator):** The 1st gathering entity **shall** record in a Mass balance / Credit account the origin of the feedstock (including from the NUTS 2 region within the member states of the EU or equivalent areas outside of the EU\(^7\) whenever relevant), type of raw material, biomass feedstock, year of harvest, intermediate products used in the production of biofuels and/or the bioliquids, volume, sustainability characteristics, GHG characteristics whenever relevant for all the potentially

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\(^6\) “Year of harvest” for wastes and residues is the year of “collection”. For more details, see Procedure: 2BS-PRO-04 “Extension of requirements for the production of biofuels, biogas and bioliquids from wastes and residues” on Chapter 5.

\(^7\) See article 19, points 2 and 3 of European Directive 2015/1513 modifying EU Directive 2009/28/EC
sustainable biomass that it received. The collection point shall record in a Mass balance / Credit account the origin of the feedstock (i.e. inputs and outputs, the type of feedstock (including wastes and residues names, categories for animal fat), year of harvest, the volume, the country of origin, the sustainability characteristics and GHG characteristics). This activity should only be performed by the most competent staff person(s), to maintain a high level of control and avoid wrong sustainability claims, at the level of each logistical site or centrally.

- **Verifier:** Records.

**Indicator 1.2.4 (Critical Indicator):** The 1st gathering entity / collection point shall ensure that only the biomass for which conformity with the sustainability requirements can be demonstrated is registered as sustainable in the Mass balance / Credit account. The following information needs to be registered and checked during internal monitoring and verification activities and by the independent auditor; type of feedstock, year of harvest, volume, country of origin, supplier, sustainability characteristics and all necessary GHG characteristics.

- **Verifier:** Scheme Declaration Form or other document listed in Indicator 0.1.3, and
- **Verifier:** Records, and
- **Verifier:** Mass balance / Credit account, and
- **Verifier:** Interview with staff members.

**Indicator 1.2.5 (Major Indicator):** The credit claim period for 1st gathering entity and related suppliers shall not exceed 14 months from a specified starting date to the cut-off date. The corresponding harvest campaign is a typical starting date. The credit claim period is set at 14 months to allow for the management of stocks, storage and sales of biomass throughout the year based on the sustainable biomass from the previous harvest season, and to cover a relevant transition period between two harvests. It shall be clearly recorded in the credit account that the credit accumulated based on the previous harvest is cancelled at a specific point in time to be defined and documented by the 1st gathering point. The credits of the last 2 months, before the cut-off date shall be limited to 20% of the credit accumulated during the first 12 months.

- **Verifier:** Credit account, or
- **Verifier:** Records.

**Indicator 1.2.5a:** The credit claim period for a collection point of agricultural residues and related suppliers shall not exceed 14 months from the date of the corresponding collection of the material to the date of sale. The credit claim period is defined to be consistent with that of the 1st gathering point. For example: with a “harvest campaign” like grape marcbs and wine lees the rule is similar to the one for feedstock and the date of harvest is fixed: August the 1st.

- **Verifier:** Credit account, or
- **Verifier:** Records.
Indicator 1.2.5b: For non-agricultural residues and wastes (e.g. UCO), the 1st gathering entity / collection point shall as a minimum establish a quarterly monitoring system to ensure that the balance of the credit account remains positive (it is possible to have a monthly monitoring system if it is more efficient for the company’s organisation). The balance must not be in ‘deficit’ at the closing date

- Verifier: Credit account, or
- Verifier: Records.

Indicator 1.2.6 (Major Indicator): The 1st gathering entity / collection point shall ensure that no credit is claimed before an equivalent credit of sustainable biomass has been harvested, purchased, received and/or registered in the credit account. The 1st gathering entity / collection point shall establish a monthly monitoring system to ensure that the balance of the credit account remains positive. A deficit in sustainable biomass and/or biofuels (i.e. that at any point in time more sustainable material has been withdrawn than has been added) shall not occur.

- Verifier: Credit account, and
- Verifier: End of month balance, and
- Verifier: Interview with staff members.

Indicator 1.2.6a (Major Indicator): For non-agricultural residues and wastes (e.g. UCO), the 1st gathering entity / collection point shall always use the same starting and ending date for the period. For example:

- If the period is a monthly period and the starting date is the fifteenth of the month, it will be always be the fifteenth of the month
- If the period is a quarterly period and the starting date is the beginning of the quarter, it will be always be the beginning of the quarter.

- Verifier: Credit account, and
- Verifier: Beginning and end period of the balance and
- Verifier: Interview with staff members.

Indicator 1.2.7: The 1st gathering entity / collection point shall maintain its credit account up-to-date for all the sustainable biomass under its ownership.

- Verifier: Credit account, or
- Verifier: End of month balance, or
- Verifier: Records.

Indicator 1.2.7a: For non-agricultural residues and wastes (e.g. UCO), the 1st gathering entity / collection point shall maintain its mass balance / credit account up-to-date for all the sustainable biomass under its ownership. If within the period more sustainable product has been received than dispatched, this difference generates a positive credit. The transfer of this “positive” credit from one period to another is only possible if the credit transfer is covered by the equivalent quantity of physical biomass (i.e. it is not possible to carry over more positive credits into the next period than the quantity, which is physically in stock at the end of the period).

- Verifier: Mass balance / Credit account, or
- Verifier: End of period balance, or
• **Verifier:** Records of physical quantities versus credits

**Indicator 1.2.8:** The 1st gathering entity / collection point **shall** ensure that the transfer of credit across national borders, or trading of virtual credit between different legal entities **is not authorized** in its procedures and does not take place.

- **Verifier:** Mass balance / Credit account, or
- **Verifier:** Records.

**Indicator 1.2.9:** The 1st gathering entity / collection point **shall** develop and implement a documented procedure to ensure that the correct credit amount is deducted from the credit account when there is transfer of ownership of sustainable biomass. A deficit in sustainable biomass (i.e. that at any point in time more sustainable material has been withdrawn than has been added) shall not occur.

- **Verifier:** Procedure, and
- **Verifier:** Credit account, and
- **Verifier:** Records, and
- **Verifier:** Interview with staff members.

**Indicator 1.2.9a:** For non-agricultural residues and wastes (e.g. UCO), the 1st gathering entity / collection point **shall** develop and implement a documented procedure to ensure that the correct quantity is deducted from the Mass Balance / Credit account when there is transfer of ownership of sustainable biomass. The balance must not be in ‘deficit’ at the closing date.

- **Verifier:** Procedure, and
- **Verifier:** Mass Balance / Credit account, and
- **Verifier:** Records, and
- **Verifier:** Interview with staff members.

**Indicator 1.2.10:** The 1st gathering entity / collection point **shall** ensure that the Mass balance / Credit account is up to date, accessible to all staff members that need it but also secured against fraud by staff members as well as third parties. This should be periodically checked as part of the monitoring and verification activities implemented by the 1st gathering entity / collection point. Records should be kept and made available to the independent auditor.

- **Verifier:** Procedure implemented to ensure that the Mass balance / Credit account system is secured, and
- **Verifier:** Mass balance / Credit account, and
- **Verifier:** Records, and
- **Verifier:** Interview with staff members.

**Indicator 1.2.11:** The 1st gathering entity / collection point **shall** ensure that the following information is included on all its sales documents, whenever a sustainability claim is made for the biomass: the type of feedstock (including wastes and residues), the volume, the country of origin, the sustainability characteristics and GHG characteristics. Sustainability claims shall not be made before an independent
verification audit has taken place and a certificate has been awarded by an approved Independent Verification Body.

- **Verifier:** Sales or delivery documents (name and address of the purchaser (downstream interface, type of sustainable biomass supplied, date the sustainable biomass left the premises and the quantity of sustainable biomass), and

- **Verifier:** Origin and GHG characteristics
  - If the (disaggregated) default value is used, it is sufficient to indicate this (e.g. GHG calculation based on default value) – the value must not be specifically stated;
  - If the (NUTS 2) value is used, it is sufficient to indicate this (e.g. GHG calculation based on NUTS 2) – the value must be specifically stated with the production region;
  - If actual value is used, the GHG emissions produced as an absolute value (cumulative across all upstream operations) in KgCO₂eq/t (dry basis) of incoming sustainable biomass for individual calculation.

**Indicator 1.2.12:** The 1st gathering entity / collection point shall only make truthful and accurate sustainability claims on sales documents, promotional documents and other communication that correspond to the relevant sustainability claim and available credit of sustainable biomass. Sustainability claims shall only be made if the 1st gathering entity / collection point can demonstrate that the sustainability criteria have been fulfilled for the relevant biomass. Sustainability claims should be checked during the monitoring and verification activities of the 1st gathering entity / collection point. Records should be kept and made available to the independent auditor.

- **Verifier:** Sales documents, or
- **Verifier:** Promotional documents, or
- **Verifier:** Other communication.

**Indicator 1.2.13:** The 1st gathering entity / collection point shall develop a coding system specifically for the products sold as sustainable in its accounting system in order to ensure that it can link the quantities sold as sustainable on the sales documents.

- **Verifier:** Linked sales documents, product codes or product identification, and accounting system.

**Criterion 1.3:** The 1st gathering entity / collection point certified under 2BS voluntary scheme shall declare before January 30th to an identified-trusted third party and bound by strict professional secrecy, the quantities of sustainable biomass sold, per type of feedstock and country of origin during the previous calendar year. Biomass and material, which are covered by other voluntary schemes with a sustainability certification, are not taken into account.

**Indicator 1.3.1:** The 1st gathering entity / collection point shall appoint a manager responsible for the implementation of the monitoring system in line with the data
issued from the mass balance, per type of biomass and or materials and country of origin marketed during the precedent calendar year.

- **Verifier:** Documented procedure and,
- **Verifier:** Evidence that procedure has been implemented and,
- **Verifier:** List with information required and records and,
- **Verifier:** Email of the identified-trusted third party (defined by 2BS Association).

**Indicator 1.3.2 (Major indicator):** The 1st gathering entity / collection point shall record the information transmitted for each type of biomass / material, country of origin, and quantity in metric tons. These records shall be available to independent auditors for review at any time.

- **Verifier:** 2BS voluntary scheme approved form, duly completed, and
- **Verifier:** Compliance with deadlines for transmission (30 of January), and
- **Verifier:** Coherency of the data transmitted to the identified-trusted third party with the mass balance information covering the period from the first of January to the 31 of December of the precedent calendar year.
Principle 2: Greenhouse Gas Savings

The 1st gathering entity shall provide to its customers all required information to ensure that the greenhouse gas emission saving from the use of potentially sustainable biofuels is in conformity with the EU Directive Article 17, section 2.

In the case of installations:
- That were in operation on or before the 5th of October 2015, a greenhouse gas emission saving of at least 35% up until the 31st of December 2017 and at least 50% from the 1st January 2018, shall be achieved for biofuels and bioliquids.
- Starting operations after the 5th of October 2015, biofuels and bioliquids shall achieve a greenhouse gas emission saving of at least 60%.

The collection point of wastes and residues shall apply only the last Criterion - 2.4

Criterion 2.1: The 1st gathering entity should ensure that biomass producers participate in the reduction of emissions of greenhouse gases to achieve the objectives of the EU Directive 2009/28/EC modified by the Directive 2015/1513.

Indicator 2.1.1: It is recommended that the 1st gathering entity should develop a plan in collaboration with biomass producers to participate in the reduction of emissions of greenhouse gases and ensure that the objectives of the EU Directive 2009/28/EC modified by the Directive 2015/1513 of 35% up until December 2017 and at least 50% from the 1st of January 2018 for installations which were in operation on or before the 5th of October 2015 and 60% for installations starting operations after the 5th of October 2015 can be achieved.

- Verifier: Reduction plan, or
- Verifier: Procedures developed to monitor progress.

Criterion 2.2: When the 1st gathering entity wants to use the disaggregated default value for the biomass, it shall use the appropriate default value proposed by Annex V point D of the EU Directive 2009/28/EC modified by the Directive 2015/1513 and shall record and justify its decision. To use a default value, the 1st gathering entity shall ensure that the biomass has not been produced on land whose use has changed since January 2008, such as the conversion of permanent grassland. Please note that default values also exist for different raw materials, such as waste vegetable or processed animal oil. Furthermore, default values for some raw materials may also depend on the process type (i.e. wheat ethanol and palm oil biodiesel). These default values must be used only when process technology and feedstock used for the production of the biofuel match their description and scope. Where there is a reference to a specific process or specific energy it is necessary to be sure that the reality of the process matches perfectly with the one used for the calculation of the default value. GHG emission data shall only be included in

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8 Member States need to be informed whether the biofuel or bioliquid has been produced in an installation that was in operation on or before the 5th of October 2015.
9 As an example for this we can take the case of methane capture during palm oil production (see “Note” p2) → For the calculation of the default value it was assumed that methane emissions are reduced so that without...
documentation if actual values have been calculated. In case default values are used it is only necessary to transmit that the default value is used, in order to simplify the administrative burden and to avoid mistakes. Therefore, it is the responsibility of downstream operators to include information concerning the (disaggregated) default GHG emission values for the final biofuels when reporting to the Member States.

**Indicator 2.2.1 (Critical indicator):** Whenever appropriate, the economic operator should use the NUTS 2 typical greenhouse gas emissions from cultivation of agricultural raw materials with emissions lower than or equal to the emissions reported under the heading ‘Disaggregated default values for cultivation’ in part D of Annex V of the EU Directive 2009/28/EC modified by the Directive 2015/1513. This is possible for NUTS2 areas included in the list validated under article 19, point 2 of the European Directive, in the case of Member States, and, in the case of territories outside the Union, in reports equivalent to those referred to in paragraph 2 (article 19, point 3). These values included in the NUTS 2 reports do not represent disaggregated default values. Therefore, they can at the time being only be used as an input for the calculation of actual values, but cannot be used to report emissions from cultivation in the unit grCO$_2$/MJ of biofuel. Additionally these values must be published on “The Commission Website” in the following unit: KgCO$_2$/dry-ton of feedstock to be considered as usable.

- **Verifier:** Location of the suppliers of biomass, or
- **Verifier:** Land registry document, or
- **Verifier:** Geographical coordinates, or
- **Verifier:** Reference Map of Agricultural Plots.
- **Verifier:** List of areas (NUTS 2 level) recognised and approved by the European Commission as available on the European Commission transparency platform.

**Indicator 2.2.2:** The 1st gathering entity shall ensure that the appropriate default values have been used to estimate the GHG emissions of the produced crop. The decision shall be recorded and justified.

- **Verifier:** GHG data for the type of crop in conformity with the European Directive Annex V point D.

**Criterion 2.3:** Whenever the 1st gathering entity wants to use calculated GHG values, the entity shall use a calculation methodology approved and recognised by the European Commission

**Indicator 2.3.1 (Critical Indicator):** When calculating GHG values, the 1st gathering entity shall use the 2BS methodology for the calculation of greenhouse gas

allocating emissions to palm oil mill effluent (POME) plants emit less than 5.46 kgs of methane per tonne of CPO.

An operator can use the default value, the NUTS 2 value or the calculated value.

The 2BS methodology is described in Procedure : “Methodology on the calculation of greenhouse gas emissions from biofuels and bioliquids under the 2BS voluntary scheme” 2BS–PRO-03.
emissions, approved or recognised by the European Commission (published on the European Commission transparency platform and in accordance to EC Decision 2010/335/EU of June 2010). No other methodology shall be used to calculate the real GHG emissions generated by the production of the biomass. It is possible to establish an average emissions factor \( e_{ac} \) for a more fine-grained level than NUTS 2 for member states or third countries. The calculation of alternative averages for areas and crops which are covered by the NUTS 2 reports should not be deemed appropriate as the appropriate averages have already been calculated by the national authorities. Furthermore, the use of average data is possible only at group farm level and not at farm level.

- **Verifier:** Calculation methodology and data used.

**Indicator 2.3.2 (Major Indicator):** Whenever actual values are used, economic operators **shall** describe in detail by writing down all relevant information in order to justify their choices and it is necessary to split the total amount of emissions into all elements of the GHG emission calculation formula that are relevant. This applies also to the elements of the formula, which are not included in the default values such as \( e_l \), \( e_{sca} \). Relevant information include: detailed description of the collection process, data used - collected at site or coming from literature\(^{12}\), in case of non-usual data an explanation must be provided, description of the calculating tool used in case it is a “specific” tool.

This documentation must be available in advance of the audit.

- **Verifier:** documentation describing the process, and
- **Verifier:** documentation describing all internal data and data coming from literature, and
- **Verifier:** explanation in case of non-usual data used, and
- **Verifier:** total amount of emissions into all elements of the GHG emission calculation formula that are relevant, and
- **Verifier:** description of the calculating tool used in case it is a “home-made” tool. …

**Criterion 2.4:** The 1st gathering entity / collection point **shall** record the biomass with the correct information in terms of GHG emission value that has been determined, either by using the EU Directive 2009/28/EC modified by the Directive 2015/1513 default values or an actual GHG calculation using a calculation methodology approved or recognized by the European Commission.

**Indicator 2.4.1 (Major Indicator):** The 1st gathering entity **shall** have recorded accurate information on the type of GHG data attached to the delivered biomass, whenever applicable.

- **Verifier:** Records of information.

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\(^{12}\) Data provided by the EU commission have to be used if possible. See http://ec.europa.eu/energy/en/topics/renewable-energy/biofuels/voluntary-schemes
**Indicator 2.4.2**: The 1st gathering entity / collection point **shall** consider wastes and residues, to have zero life cycle greenhouse gas emissions up to the process of collection. In case actual value is used, instead of usable default value for transportation $e_{td}$, GHG calculation emissions shall be done from the “point of origin” which is, for example:
- The farm for agricultural raw material,
- The restaurant for UCO,
and not only from the 1st gathering entity / collection point which is the place where the Crop / the wastes and residues are gathered.
- **Verifier**: Mass balance / Credit account, and
- **Verifier**: GHG records.
Principle 3: High Biodiversity Land

Sustainable biofuels **shall not** be made from raw material produced on land with High Biodiversity Value (EU Directive 2009/28/EC modified by the Directive 2015/1513, Article 17, section 3).

**Criterion 3.1:** The 1<sup>st</sup> gathering entity **shall** demonstrate that a system has been implemented to inform biomass producers claiming sustainability that raw material for the production of sustainable biofuels does not come from land that had/ has High Biodiversity Status in or after January 2008, unless, for the areas covered by the article 17-3-b of the RED only, it can provide evidence that the production of raw material did not interfere with nature protection purposes.

**Indicator 3.1.1 (Major Indicator):** The 1<sup>st</sup> gathering entity **shall** ensure that all its suppliers of biomass claiming sustainability have been informed and have made a declaration that raw material for the production of sustainable biofuels does not come from land that had/ has High Biodiversity Status in or after January 2008, unless it can provide evidence that the production of raw material did not interfere with nature protection purposes.

- **Verifier:** Signed Scheme Declaration Form with specific clause, or
- **Verifier:** Contract with appropriate clause, or
- **Verifier:** Amendment to existing contract making reference to new requirements.
- **Verifier:** Other questionnaire or form with specific clause, used during site visits by 1<sup>st</sup> gathering entity.

**Indicator 3.1.2:** The 1<sup>st</sup> gathering entity **shall** in collaboration with its suppliers identify land that had High Biodiversity Status in or after January 2008, within its region of activity, unless it can provide evidence that the production of raw material did not interfere with nature protection purposes. Records shall be kept.

- **Verifier:** Records of verifications of suppliers, or
- **Verifier:** Maps or other registry of land identified as High Biodiversity Value land, or
- **Verifier:** Interview with suppliers.

**Criterion 3.2:** The 1<sup>st</sup> gathering entity **shall** demonstrate that it has identified the land that had High Biodiversity Status in or after January 2008 within its region of activity, unless it can provide evidence that the production of raw material did not interfere with nature protection purposes.

**Indicator 3.2.1:** The 1st gathering entity **shall** have access to an up-to-date list of the official documents from competent authorities regarding high biodiversity in its region of activity. The designated manager shall maintain access to all the relevant information for the region concerned. Access to such information and the relevance of this information shall be checked by the independent auditor.
Verifier: List of official documents from competent authorities, or
Verifier: Access to relevant Websites such as IUCN, Natura 2000. or
Verifier: Satellite images, site surveys or maps that comprehensively cover the entire region in which the raw material is being produced and are from an official land registry source.

Indicator 3.2.2: The 1st gathering entity shall use the official documents to identify the areas with potentially high biodiversity in its region of activity and keep records. Records should be made available to and be checked for relevance by the independent auditor.

Verifier: Satellite images, site survey, official maps or other registry of land identified as High Biodiversity Value land, or
Verifier: Satellite images, site surveys or maps that comprehensively cover the entire region in which the raw material is being produced and are from an official land registry source.

Indicator 3.2.3 (Critical Indicator): The 1st gathering entity shall ensure that biomass does not come from land that was primary forest or other wooded land (i.e. forest and other wooded land of native species where there is no clearly visible indication of human activity and the ecological processes are not significantly disturbed) in or after January 2008. This should be checked by means of a risk analysis by the 1st gathering entity. If any risk has been identified, then the 1st gathering entity shall investigate to ensure that this sustainability criterion is respected. Evidence of the investigation shall be recorded and shall be made available to the independent auditor.

Verifier: Satellite images, site surveys, official maps or other registry of land identified as primary forest and other wooded land where there is no clearly visible indication of human activity and the ecological processes are not significantly disturbed in or after January 2008, or
Verifier: Satellite images, site surveys, official maps or other registry that shows that the land could not be considered as primary forest or other wooded land shortly (at most 36 months) before January 2008, or
Verifier: Satellite images, site surveys or maps that comprehensively cover the entire region in which the raw material is being produced and are from an official land registry source, or
Verifier: Information, reports, satellite images or GIS system showing that the localization of each biomass producer has been compared to the identified high biodiversity areas in the region of activity, or
Verifier: Previous production and sales contract(s) with biomass producers from before January 2008 covering the same production area.

Indicator 3.2.4 (Critical Indicator): The 1st gathering entity shall ensure that biomass does not come from geographic ranges of the European Union which shall always be regarded as “highly biodiverse grassland” as defined by Commission Regulation (EU) No 1307/2014 of the 8th of December 2014, in or after January 2008.

• 1: Habitats as listed in Annex I of Council Directive 92/43/EEC,
• 2: Habitats of significant importance for animal and plant species of Union interest listed in Annexes II and IV of Directive 92/43/EEC,


This should be checked against a risk analysis performed by the 1st gathering entity. If any risk has been identified, then the 1st gathering entity shall investigate to ensure that the sustainability criteria are respected. Evidence of the investigation shall be recorded and shall be made available to the independent auditor.

• **Verifier:** Satellite images, site surveys, official maps or other registry of land identified as above-named “Habitats” in or after January 2008, or

• **Verifier:** Information, report, satellite images or GIS system showing that the localization of each biomass producer has been compared to the identified above-named “Habitats” in the region of activity, or

• **Verifier:** Previous production and sales contract(s) with biomass producers from before January 2008 covering the same production area.

**Indicator 3.2.5 (Critical Indicator):** The 1st gathering entity shall demonstrate that the collected biomass is not coming from “grassland”, that was qualified as highly biodiverse in January 2008 or afterwards. This requires distinguishing highly biodiverse grassland from other land. In order to make this distinction, it needs to be established whether the grassland would remain or cease to be grassland in the absence of “human intervention”, for "natural highly biodiverse grassland" and "non-natural highly biodiverse grassland", respectively.

**Case 1 – Natural highly biodiverse grassland**

a) Land located in geographic ranges of the European Union, as defined by Commission Regulation (EU) no 1307/2014, article 2.

b) For the land located outside the above geographies range in or out the European Union an on-site assessment is required to check whether the grassland maintains or would have maintained the natural species composition and ecological characteristics and processes. If this is the case the land has to be considered to be or have been natural highly biodiverse grassland.

**Case 2 – Non-natural highly biodiverse grassland**

a) Land located in geographic ranges of the European Union, as defined by Commission Regulation (EU) no 1307/2014, article 2.

b) For the land located outside the above geographies range in or out the European Union an on-site assessment is required to check whether the land is/was degraded and species rich. If the land is not degraded and species rich, or it was before being converted, it has to be considered as non-natural highly biodiverse grassland.

The lead auditor (verification body) must judge whether an assessment to determine whether the land is (or not in case of conversion was) highly biodiverse grassland is necessary in the above Cases 1 b) and 2 b). In these precise situations, an expert
(qualified independent specialist) who may be additional to the audit team must conduct the assessment. The assessment and result must be reviewed as part of the audit.

An onsite assessment by an expert is required to assess whether grassland is highly biodiverse. An exception is possible if desk based evidence (e.g. maps prepared by national entities) is used to show that the land must be regarded to be highly biodiverse grassland. Such an assessment does not need to be done annually. Often, it is sufficient that it is done once e.g. if a piece of grassland is converted into arable land to grow agricultural raw material.

In order to provide evidence that “grassland” is not “highly biodiverse grassland” the following criteria and definitions shall apply:

1. “Grassland” means terrestrial ecosystems dominated by herbaceous or shrub vegetation for at least 5 years continuously. It includes meadows or pasture that is cropped for hay but excludes land cultivated for other crop production and cropland lying temporarily fallow. It further excludes continuously forested areas as defined in Article 17(4)(b) of Directive 2009/28/EC unless these are agro-systems which include land-use systems where trees are managed together with crops or animal production systems in agricultural settings. The dominance of herbaceous or shrub vegetation means that their combined ground cover is larger than the canopy cover of trees;

2. “Human intervention” means managed grazing, mowing, cutting, harvesting or burning;

3. “Natural highly biodiverse grassland” means grassland that:
   (a) would remain grassland in the absence of human intervention; and
   (b) maintains the natural species composition and ecological characteristics and processes;

4. “Non-natural highly biodiverse grassland” means grassland that:
   (a) would cease to be grassland in the absence of human intervention; and
   (b) is not degraded, that is to say it is not characterised by long-term loss of biodiversity due to for instance overgrazing, mechanical damage to the vegetation, soil erosion or loss of soil quality; and
   (c) is species-rich, that is to say it is:
      (i) a habitat of significant importance to critically endangered, endangered or vulnerable species as classified by the International Union for the Conservation of Nature Red List of Threatened Species or other lists with a similar purpose for species or habitats laid down in national legislation or recognised by a competent national authority in the country of origin of the raw material; or
      (ii) a habitat of significant importance to endemic or restricted-range species; or
      (iii) a habitat of significant importance to intra-species genetic diversity; or
(iv) a habitat of significant importance to globally significant concentrations of migratory species or congregatory species; or
(v) a regionally or nationally significant or highly threatened or unique ecosystem.

In addition, grassland located in the following geographic ranges of the European Union shall always be considered as “highly biodiverse grassland” and no assessment is required:

2. Habitats of significant importance for animal and plant species of Union interest listed in Annexes II and IC to Directive 92/43/EEC;
4. Highly biodiverse grassland in the European Union is not limited to the geographic ranges referred to above. Other grassland might fulfil the criteria for highly biodiverse grassland as well.

Outside of the European Union “highly biodiverse grassland” is not covered by geographic limitations given by Commission Regulation (EU) No 1307/2014 of the 8th of December 2014

Where evidence is provided that the harvesting of the raw material is necessary to preserve the grassland status of a non-natural grassland, no further evidence to show compliance with Article 17(3) (c) (ii) of Directive 2009/28/EC modified by Directive 2015/1513 needs to be provided.

- **Verifier:** Satellite images, site surveys, official maps or other registry of land identified as “grassland” which are not “highly biodiverse grassland” in or after January 2008, or
- **Verifier:** Information, report, satellite images or GIS system showing that the localization of each biomass producer has been compared to the identified map of “grassland” which is not “highly biodiverse grassland” in the region of activity, or
- **Verifier:** Previous production and sales contract(s) with biomass producers from before January 2008 covering the same production area, and
- **Verifier:** Onsite assessment reports written by an expert (qualified independent expert) when determining when land is (or in the case of conversion was ) highly biodiverse grassland for the Cases 1 b) and or 2 b)
- **Verifier:** Desk based evidence (e.g. maps prepared by national entities) is used to show that the land must be regarded to be highly biodiverse grassland
Indicator 3.2.6 (Critical Indicator): The 1st gathering entity shall ensure that biomass does not come:

- From areas designated by law, or by other competent national authority, for nature protection purposes, or
- From areas designated for the protection of rare, threatened or endangered ecosystems or species recognised by international agreements or included in lists drawn up by intergovernmental organisations or the IUCN, subject to their recognition by the European Commission, unless the 1st gathering entity can provide evidence that the production of that raw material did not interfere with the nature protection purposes.

- **Verifier:** Official maps or other registry of land identified for nature protection purposes (as indicated above) in or after January 2008.
- **Verifier:** Official maps or other registry that shows that the land could not be considered as being dedicated to nature protection purposes (as indicated above) shortly (at most 36 months) before January 2008.
- **Verifier:** Previous production and sales contract(s) with biomass producers from before January 2008 covering the same production area, or
- **Verifier:** Information, report, satellite images or GIS system showing that the localization of each biomass producer has been compared to the identified high biodiversity areas in the region of activity, or
- **Verifier:** Onsite audits when the quality and lack of data (e.g. maps or other registries) do not enable a desk study.

Criterion 3.3: The 1st gathering entity should record whether the country of origin of the biomass has ratified and implemented the relevant international biodiversity agreements, conventions and protocol.

**Indicator 3.3.1:** The 1st gathering entity should record whether the country of origin of the biomass has ratified and implemented the Cartagena Protocol on Biosafety.

- **Verifier:** Up-to-date list of countries that have ratified and implemented the Cartagena Protocol on Biosafety: [http://www.cbd.int/biosafety/signinglist.shtml](http://www.cbd.int/biosafety/signinglist.shtml)
- **Verifier:** Up-to-date list of suppliers with biomass’ country of origin.

**Indicator 3.3.2:** The 1st gathering entity should record whether the country of origin of the biomass has ratified and implemented the Convention on International Trade in Endangered Species of Wild Fauna and Flora.

- **Verifier:** Up-to-date list of countries that have ratified and implemented the Convention on International Trade in Endangered Species of Wild Fauna and Flora: [http://www.cites.org/eng/disc/parties/alphabet.shtml](http://www.cites.org/eng/disc/parties/alphabet.shtml)
- **Verifier:** Up-to-date list of suppliers with biomass’ country of origin.
** Principle 4 : High Carbon Stock Land **

*Sustainable biofuels shall not be made from raw material produced on land with High Carbon Stock (EU Directive 2009/28/EC modified by the Directive 2015/1513, Article 17, section 4).*

**Criterion 4.1:** The 1st gathering entity **shall** demonstrate that a system has been implemented to inform biomass producers claiming sustainability that raw material for the production of sustainable biofuels shall not come from land that had High Carbon Stock status in January 2008 and no longer has that status.

**Indicator 4.1.1 (Major Indicator):** The 1st gathering entity **shall** ensure that all its suppliers of biomass claiming sustainability have been informed and have completed a declaration that raw material for the production of sustainable biofuels does not come from land that had High Carbon Stock status in January 2008 and no longer has that status.

- **Verifier:** Signed Scheme Declaration Form with specific clause, or
- **Verifier:** Amendment to previous contract making reference to new requirements.

**Indicator 4.1.2:** The 1st gathering entity **shall** in collaboration with its suppliers identify land that had High Carbon Stock status in January 2008 and no longer has that status within its region of activity. Records shall be kept.

- **Verifier:** Records of verifications of suppliers, or
- **Verifier:** Maps or other registry of land identified previously as High Carbon Stock according to the definition in section 4, and
- **Verifier:** Interview with suppliers, or
- **Verifier:** Onsite audits when the quality and lack of data (e.g. maps or other registries) do not enable a desk study due to missing evidence.

**Criterion 4.2:** The 1st gathering entity **shall** demonstrate that it has identified the land that had High Carbon Stock status in January 2008 and no longer has that status within its region of activity.

**Indicator 4.2.1:** The 1st gathering entity **shall** have access to official documents from competent authorities identifying High Carbon Stock areas in January 2008 and no longer has that status in its region of activity. The designated manager shall maintain access to all the relevant information for the region concerned. Access to such information and the relevance of this information shall be checked by the independent auditor.

- **Verifier:** Satellite images, site surveys, official maps or list of official documents from competent authorities, or
- **Verifier:** Access to relevant Websites.
Indicator 4.2.2 (Critical Indicator): The 1st gathering entity shall ensure that biomass does not come from continuously forested areas\textsuperscript{13}, of more than 1 hectare with trees higher than five metres and a canopy cover of more than 30% or with trees that are able to reach those thresholds in situ. This should be checked following a risk analysis by the 1\textsuperscript{st} gathering entity. If any risk has been identified, then the 1\textsuperscript{st} gathering entity shall investigate to ensure that these sustainability criteria are respected. Evidence of the investigation shall be recorded and shall be made available to the independent auditor.

- **Verifier:** Satellite images, site surveys, official maps or other registry of continuously forested areas, of more than 1 hectare with trees higher than five metres and a canopy cover of more than 30% or with trees that are able to reach those thresholds in situ, or
- **Verifier:** Previous production and sales contract(s) with biomass producers from before January 2008 covering the same production area, or
- **Verifier:** Information, reports, satellite images or GIS system showing that the localization of each biomass producer has been compared to the identified continuously forested areas in the region of activity, or
- **Verifier:** Onsite audits when the quality and lack of data (e.g. maps or other registries) do not enable a desk study by missing evidence.

Indicator 4.2.3 (Critical Indicator): The 1st gathering entity shall ensure that biomass does not come from land spanning more than 1 hectare with trees higher than five metres and a canopy cover of between 10% and 30%, or trees able to reach those thresholds in situ, unless evidence is provided that the carbon stock of the area before and after conversion is such that, when the methodology laid down in part C of Annex V of the RED is applied, the conditions laid down in paragraph 2 of this Article (RED) would be fulfilled (Art. 17 (4) (c)).

This should be checked following a risk analysis by the 1\textsuperscript{st} gathering entity. If any risk has been identified, then the 1\textsuperscript{st} gathering entity shall investigate to ensure that these sustainability criteria are respected. Evidence of the investigation shall be recorded and shall be made available to the independent auditor.

- **Verifier:** Satellite images, site surveys, official maps or other registry of areas with 10 to 30% tree canopy cover (i.e. trees higher than five metres), unless the 1st gathering entity can demonstrate that the GHG impact, including any change since January 2008 in the carbon stock of the area concerned, (calculated according to the methodology laid down in part C of Annex V of EU Directive 2009/28/EC and EC Decision 2010/335/EU of June 2010 and documents available on the European Commission transparency platform) meets the appropriate GHG saving threshold specified in EU Directive 2009/28/EC modified by Directive 2015/1513; or

\textsuperscript{13} Continuously forested areas do not include land that is predominantly under agricultural or urban land use. In this context, agricultural land use refers to tree stands in agricultural production systems, such as fruit tree plantations, oil palm plantations and agro-forestry systems when crops are grown under tree cover.
• **Verifier:** Previous production and sales contract(s) with biomass producers from before January 2008 covering the same production area, or

• **Verifier:** Information, report, satellite images or GIS system showing that the localization of each biomass producer has been compared to the identified sparsely forested areas in the region of activity.

**Indicator 4.2.4 (Critical Indicator):** The 1st gathering entity **shall** ensure that biomass does not come from wetlands, land that is covered with or saturated by water permanently or for a significant part of the year. This should be checked following a risk analysis by the 1st gathering entity. If any risk has been identified, then the 1st gathering entity shall investigate to ensure that the sustainability criteria are respected. Evidence of the investigation shall be recorded and shall be made available to the independent auditor.

• **Verifier:** Satellite images, site surveys, official maps or other registry of wetlands, or

• **Verifier:** Previous production and sales contract(s) with biomass producers from before January 2008 covering same production area, or

• **Verifier:** Information, reports, satellite images or GIS system showing that the geographic position of each biomass producer has been compared to the identified wetlands in the region of activity, or

• **Verifier:** Onsite audits when the quality and lack of data (e.g. maps or other registries) do not enable a desk study due to missing evidence.

**Indicator 4.2.5:** The 1st gathering entity **shall** use the official documents to identify the areas that had High Carbon Stock status in January 2008 and no longer have that status in its region of activity.

• **Verifier:** Satellite images, site surveys, official maps or other registry of land identified as High Carbon Stock land, or

• **Verifier:** Previous production and sales contract(s) with biomass producers from before January 2008 covering the same production area, or

• **Verifier:** Information, report, satellite images or GIS system showing that the localization of each biomass producer has been compared to the identified areas that had high carbon stock status, or

• **Verifier:** Onsite audits when the quality and lack of data (e.g. maps or other registries) do not enable a desk study due to missing evidence.
Principle 5 : Peat land
Sustainable biofuels shall not be made from raw material produced on land that was Peat land (EU Directive 2009/28/EC modified by the Directive 2015/1513, Article 17, section 5).

Criterion 5.1: The 1st gathering entity shall demonstrate that a system has been implemented to inform biomass producers claiming sustainability that raw material for the production of sustainable biofuels shall not come from land that was peat land in January 2008.

Indicator 5.1.1 (Major Indicator): The 1st gathering entity shall ensure that all its suppliers of biomass claiming sustainability have been informed and have completed a declaration that raw material for the production of sustainable biofuels does not come from land that was peat land in January 2008.

- **Verifier:** Signed Scheme Declaration Form with specific clause, or
- **Verifier:** Amendment to previous contract making reference to new requirements.

Indicator 5.1.2: The 1st gathering entity shall in collaboration with its suppliers identify land that was peat land in January 2008 within its region of activity. Records shall be kept.

- **Verifier:** Records of verifications of suppliers, or
- **Verifier:** Maps or other registry of land identified previously as peat land according to the definition in section 4, and
- **Verifier:** Interview with suppliers, or
- **Verifier:** Onsite audits when the quality and lack of data (e.g. maps or other registries) do not enable a desk study due to missing evidence.

Criterion 5.2: The 1st gathering entity shall demonstrate that it has identified the land that was peat land in January 2008 within its region of activity.

Indicator 5.2.1: The 1st gathering entity shall have access to official documents from competent authorities identifying land that was peat land in January 2008 in its region of activity. The designated manager shall maintain access to all the relevant information for the region concerned. Access to such information and its relevance shall be checked by the independent auditor.

- **Verifier:** Satellite images, site surveys, official maps or list of official documents from competent authorities, or
- **Verifier:** Access to relevant Websites.

Indicator 5.2.2 (Critical Indicator): The 1st gathering entity shall ensure that biomass (Peat itself is not considered biomass) does not come from areas that were peat land in January 2008, unless the soil was completely drained in January 2008 or there has been no draining of the soil since January 2008. Where drainage was partial before January 2008 a subsequent deeper drainage, affecting soil that was not fully drained, would be considered as drainage completed after January 2008. This should
be checked following a risk analysis by the 1st gathering entity. If any risk has been identified, then the 1st gathering entity shall investigate to ensure that the sustainability criteria are respected. Evidence of the investigation shall be recorded and shall be made available to the independent auditor. If any drainage of the land has happened since January 2008, then the biomass coming from this land shall not be considered as sustainable.

- **Verifier:** Satellite images, site surveys, official maps or other registry of areas that were peat land in January 2008 with evidence that there has been no draining of the soil since January 2008. Acceptable evidence that no draining has taken place is; maps showing that area is still identified as peat land, land registry, satellite images showing that the area identified as peat land is not cultivated, site visit. Any map used as evidence should comprehensively cover the entire region in which the raw material is being produced and should be from an official land registry source.

- **Verifier:** Previous production and sales contract(s) with biomass producers from before January 2008 covering the same production area, or

- **Verifier:** Information, reports, satellite images or GIS system showing that the localization of each biomass producer has been compared to the identified peat land areas in the region of activity.

- **Verifier:** Soil analysis (mass of organic material)

  As peat land soil is soil that, when analysed up to a depth of 60 cm, exhibits organic material (peat substrate) in horizontal layers with a total thickness of at least 30 cm. The mass of the organic material in such circumstances is at least 20% organic carbon in the fine soil, and

- **Verifier:** Availability of records addressing the reduction of the average annual water level due to an increased water loss or a reduced water supply because of human activities or installations both inside and outside of an area.

- **Verifier:** Onsite audits when the quality and lack of data (e.g. maps or other registries) do not enable a desk study due to missing evidence.

**Indicator 5.2.3:** The 1st gathering entity **shall** use the official documents to identify the areas that were peat land in January 2008 in its region of activity.

- **Verifier:** Satellite images, site surveys, official maps or other registry of land that was peat land in January 2008.

- **Verifier:** Previous production and sales contract(s) with biomass producers from before January 2008 covering the same production area, or

- **Verifier:** Information, reports, satellite images or GIS system showing that the localization of each biomass producer has been compared to the identified high biodiversity areas in the region of activity.

- **Verifier:** Onsite audits when the quality and lack of data (e.g. maps or other registries) do not enable a desk study by missing evidence.
**Principle 6 : Agro-environmental Practices**

Sustainable biofuels shall not be made from raw material produced within the Community that have not been cultivated in accordance with the requirements and standards under the provisions referred to under the heading ‘Environment’ in part A and in point 9 of Annex II to Council Regulation (EC) No 73/2009 of January 2009 and with the minimum requirements for good agricultural and environmental condition established in Article 6(1) of that Regulation. (While it is clear that agro-environmental practices have to be followed (European Directive article 17.6 and EC Communication section 2), verification of compliance is not addressed in the European Directive and voluntary schemes are not expected to cover the criteria related to agricultural and environmental requirements and standards for EU farmers (EC Communication section 2 and 2.2). This is the reason why this Principle is indicated as a recommendation and is indicative only). According to the EC Communication, it is the responsibility of the Member States to cover and monitor on their territory all farmers that supply raw material for biofuels/bioliquids.

**Criterion 6.1:** The 1st gathering entity should ensure that all suppliers of biomass claiming sustainability based within the Community are committed to fulfil the requirements of the relevant agro-environmental practices.

**Indicator 6.1.1:** The 1st gathering entity should ensure that all its suppliers based in the Community declare that they comply with the European Agro-Environmental Practices.

- **Verifier:** Signed Scheme Declaration Form with specific clause, or
- **Verifier:** Amendment to previous contract making reference to new requirements.

**Indicator 6.1.2:** The 1st gathering entity should keep track of new European Legislation and inform its suppliers of any change.

- **Verifier:** Information communicated to suppliers, or
- **Verifier:** Up-to-date information communicated by other official organisations (e.g. Chamber of agriculture).

**Criterion 6.2:** The 1st gathering entity should inform, train and/or advise suppliers on best environmental and agricultural practices in conformity with the European Legislation.

**Indicator 6.2.1:** The 1st gathering entity should have appropriate resources to advise suppliers on best environmental and agricultural practices in conformity with the European Legislation.

- **Verifier:** Interview with suppliers
Principle 7 : Soil, Water and Air Protection

Sustainable biofuels should not be made from raw material produced on land where soil, water and air have not been protected (EU Directive Article 18, section 3). This criterion of the European Directive is not a requirement for the 1st gathering entity. This is the reason why this Principle is worded as a recommendation and is indicative only.

Criterion 7.1: The 1st gathering entity should inform biomass producers that raw material for the production of sustainable biofuels shall not come from land where soil, water and air have not been protected.

Indicator 7.1.1: The 1st gathering entity should inform all its suppliers that appropriate measures must be implemented to protect soil, water and air.
- Verifier: Information pack, or
- Verifier: Interview with suppliers.

Indicator 7.1.2: The 1st gathering entity should ensure that biomass comes from land where soil has been protected.
- Verifier: Agriculture practices to protect soils against erosion between 2 crops, or
- Verifier: Procedure regarding agriculture practices to protect soil against erosion between 2 crops.

Indicator 7.1.3: The 1st gathering entity should ensure that biomass does not come from land where excessive water has been consumed in areas where, and during the period when, water is scarce.
- Verifier: Map of the area where water can be considered as scarce, or
- Verifier: Records of rainfall for the region of activity, or
- Verifier: Official authorization,

Indicator 7.1.4: The 1st gathering entity should ensure that biomass comes from land where air has been protected.
- Verifier: Document indicating that burning is not authorized, or
- Verifier: Procedure indicating that burning is not carried out.
**Principle 8: Social Sustainability**

*For countries that are an important source of raw material for sustainable biofuels, the 1st gathering entity *should* report whether the country of origin has ratified and implemented the ILO conventions No 29, 87, 98, 100, 105, 111, 138 and 182. This criterion of the European Directive is not a requirement for the 1st gathering entity. This is the reason why this Principle is worded as a recommendation and is indicative only.*

**Criterion 8.1:** The 1st gathering entity that imports raw material *should* have appropriate information on the countries that have ratified the relevant ILO Conventions.

**Indicator 8.1.1:** The 1st gathering entity *should* have access to a list of all the countries that have ratified the relevant ILO Conventions.

- **Verifier:** Access to the relevant Website (http://www.ilo.org/ilolex/english/)

**Criterion 8.2:** The 1st gathering entity that imports raw material *should* have appropriate information on the countries of origin of the imported biomass with a sustainability claim.

**Indicator 8.2.1:** The 1st gathering entity *should* establish and periodically update a list of all the countries of origin of the biomass that it has received.

- **Verifier:** List of all the countries of origin.

**Indicator 8.2.2:** The 1st gathering entity *should* maintain and keep up-to-date records of the volumes of biomass with a sustainability claim per country of origin.

- **Verifier:** records of the volumes of biomass with a sustainability claim per country of origin.

**Criterion 8.3:** For each country of origin, the 1st gathering entity *should* have appropriate information.

**Indicator 8.3.1:** For each country of origin, the 1st gathering entity *should* have a list of all its suppliers within the country.

- **Verifier:** List of suppliers for each country of origin.

**Indicator 8.3.2:** For each country of origin, the 1st gathering entity *should* have records of the volumes of produced and imported biomass with a sustainability claim.

- **Verifier:** Records of volumes produced for each country of origin.

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