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BONSUCRO



BONSUCRO®

BONSUCRO/BONSUCRO EU RED MASS
BALANCE COC STANDARD

ACKNOWLEDGEMENT

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1. INTRODUCTION

1.1 BONUCRO

Bonsucro is a global multi-stakeholder non-profit initiative dedicated to reducing the environmental and social impacts of sugarcane production while recognising the need for economic viability. The mission of Bonsucro is to achieve a sugarcane sector that is continuously improving and verified as sustainable by acting collaboratively within the sector and working to continuously improve the three pillars of sustainability: economic, social and environmental viability. Bonsucro aims to achieve this mission through providing the definition for sustainable sugarcane and all sugarcane derived products through a multi-stakeholder approach. Bonsucro also aims at ensuring the integrity of the implementation of the Bonsucro Production and Chain of Custody Standards, through the implementation of the Certification Protocol.

1.2 OBJECTIVE OF THE MASS BALANCE CHAIN OF CUSTODY (CoC) STANDARD

The objective of this Bonsucro Mass Balance Chain of Custody (CoC) Standard is to provide assurance that claims of compliance can be tracked along the supply chain.

Economic operators undergoing the Bonsucro certification process must comply with Bonsucro Mass Balance CoC Standard. It must also be used by Licensed Certification Bodies and auditors when carrying out certification audits. Finally it may be used by the wider audience of the sugarcane sector and any other interested parties.

The document must be used in conjunction with the Guidance for the Bonsucro/Bonsucro EU RED Mass Balance CoC Standard, which provides support to operators for compliance with the Mass Balance CoC Standard.

1.3 HISTORY OF THE DOCUMENT

1.3.1 Version 4.0

In March 2014, upon the recommendation of the Bonsucro Secretariat, the Board of Directors agreed to start the revision process of the Bonsucro/Bonsucro EU RED Mass Balance CoC Standard and Guidance. The Board instructed the Secretariat to follow

the Standard Revision Procedure set up in line with the ISEAL Code of Best Practice for Standard Setting. The Secretariat called for one representative of each class of membership to form the Standard Revision Taskforce (SRT). The SRT first met remotely in September 2014. The SRT was given the task to draft the new version of the Bonsucro/Bonsucro EU RED Mass Balance CoC Standard and Guidance. All meeting minutes are publicly available on the Bonsucro website.

A total of 54 people participated in the two public consultations (38 presencially and 16 online) held through November 2014 to January 2015 and in June 2015.

REVISION ROUND	DATE	DESCRIPTION OF AMENDMENT
A	June 2010	Draft version send to Bonsucro EU Sub Committee
B	July 2010	Final version approved by Bonsucro Management Committee
C	December 2010	Revision made based on compliance with EU RED
D	February 2011	Revision made based on compliance with EU RED
Draft version 4.0	November 2014	First draft open for public consultation
2nd Draft version 4.0	June 2015	Second draft open for public consultation
3rd Draft version 4.0	September 2015	Final draft published for vote by members
4.0	October 2015	Revised Bonsucro Mass Balance Chain of Custody Standard and Guidance published, with inclusion of new indicators

This document is written in the English language. Bonsucro does not assume any liability for errors or misunderstandings introduced when this document is translated into other languages.

Bonsucro Standards are reviewed at least every five years. The next review is scheduled for October 2020.

The current standard was approved by the Bonsucro membership on 17th October 2015. It becomes effective from 26th November 2015 and will apply only to activities that have taken place after this date.

From 26th November 2015 onward, non-certified economic operators who wish to become Bonsucro/Bonsucro EU RED Mass Balance CoC certified must be found in compliance with the revised Bonsucro/Bonsucro EU RED Mass Balance CoC Standard version 4.0.

Certified economic operators whose audit is planned between 26th November 2015 and 31st January 2016, will have the possibility to choose to be audited against version 3 or version 4.0 of the Bonsucro/Bonsucro EU RED Mass Balance CoC Standard.

Bonsucro/Bonsucro EU RED Mass Balance CoC certified economic operators must be in compliance with the revised Bonsucro/Bonsucro EU RED Mass Balance CoC Standard (version 4.0) from 1st February 2017 onward.

Bonsucro encourages its stakeholders to share their views regarding the Standards. Any comments on this document will be used for future revisions and can be submitted to info@bonsucro.com, via the Bonsucro website: www.bonsucro.com, or in writing to:

Bonsucro
The Wenlock
50-52 Wharf Road
London, N1 7EU, UK

2. SCOPE

This standard applies to any economic operator purchasing, handling and/or trading Bonsucro-compliant or Bonsucro EU RED-compliant material. It describes the requirements to ensure the traceability of Bonsucro-compliant or Bonsucro EU RED-material by implementing a mass balance system.

Economic operators may choose any of the following two scopes for certification and associated compliance claims:

1. “Bonsucro”: compliant with Bonsucro requirements.
2. “Bonsucro EU RED”: compliant with Bonsucro requirements PLUS additional requirements from the EU Renewable Energy Directive (RED- 2009/28/EC), the EU Fuel Quality Directive (FQD- 2009/30/EC) and additional communication from the European Commission (Com 2010/C 160/02 and BK/gS/ener.c.1(2014)3648524).

Within the Bonsucro Certification System documents (i.e. Standards, Guidance, and Certification Protocol) the extra Bonsucro EU RED requirements are clearly marked. For certification against Bonsucro EU RED, the Bonsucro requirements PLUS all additional EU RED requirements must be met.

The Bonsucro EU RED certification is intended for ethanol, ETBE or other products wishing to demonstrate compliance with the EU Renewable Energy Directive (RED- 2009/28/EC), the EU Fuel Quality Directive (FQD- 2009/30/EC) and additional communication from the European Commission (Com 2010/C 160/02 and BK/gS/ener.c.1(2014)3648524).

Eligibility of wastes and residues for double counting against the EU RED is defined by each Member State and economic operators should seek additional guidance on this.

3. REFERENCED PUBLICATIONS

- Guidance to the Bonsucro/Bonsucro EU RED Mass Balance CoC Standard v4.0 October 2015
- Bonsucro Production Standard v4.1.1 September 2015
- Bonsucro Certification Protocol v4.1 September 2011
- Bonsucro Calculator v4.05 January 2015
- Communication from the Commission on the practical implementation of the EU biofuels and bioliquids sustainability scheme and on counting rules for biofuels (2010/C 160/02)
- Claims and Labelling; Logo Use requirements document v5.02 January 2014
- European Commission's Communication 2010/C 160/02 (2010) on the practical implementation of the EU biofuels and bioliquids sustainability scheme and on counting rules for biofuels
- European Commission's Communication 2011/13/EU (2011) on certain types of information about biofuels and bioliquids to be submitted by economic operators to Member States
- EU Directive 2009/28/EC (RED) on the promotion of the use of energy from renewable sources
- EU Directive 2009/30/EC (FQD) as regards the specification of petrol, diesel and gas-oil and introducing a mechanism to monitor and reduce greenhouse gas emissions
- ISEAL Code of Good Practice for Setting Social and Environmental Standards v6.0 December 2014
- Letter to the voluntary schemes that have been recognised by the Commission for demonstrating compliance with the sustainability criteria for biofuels (BK/gS/ener.c.1(2014)3648524)
- Requirements for the operation of the Bonsucro Credit Trading System v1.2 April 2014

4. DEFINITIONS AND ABBREVIATIONS

Normative references for definitions referring to:

ISO 9000:2005; ISO 14001:2004; ISO IEC Guide 17000:2004; EU RED (2009/28/EC); EU FQD (2009/30/EC); CEN/TC383

BONSUCRO CERTIFIED MEMBERS: Bonsucro members who are in compliance with the Bonsucro Certification System.

CANE SUPPLY AREA: area which a mill defines as the farms/estates supplying cane for the purposes of certification.

CERTIFICATION BODY: i.e. Conformity Assessment Body; Body that performs the audit

Note 1 - An accreditation body is not a conformity assessment body (ISO/IEC 17000:2004) (Source: Adapted from ISO/IEC 17011:2005)

CHAIN OF CUSTODY: the supply chain of a product including all stages from the feedstock production up until the release of the product for consumption.

CLIENT: next legal owner of the product in the Chain of Custody.

CONSIGNMENT: quantity (e.g. batch, lot, load) of product mass with attached data specifying the product content in terms of kilograms (or tons of sugar or litres/m³ of ethanol) and sustainability characteristics.

CONVERSION FACTORS: are the ratio between the output material and the input material. Conversion factors will be specific to facilities and should be accurately documented in the mass balance system.

DOCUMENT: Information and its supporting medium.

Note 1 - The medium can be paper, magnetic, electronic or optical computer disk, photograph or master sample, or a combination thereof;

Note 2 - Adapted from ISO 9001:2000; ISO 14001:2004

ECONOMIC OPERATOR: Individual, company or organization which has ownership and/or control of sugarcane and/or all sugarcane derived products, from their origin to their market availability, for one or several steps in the supply chain.

Note 1 - Organisation is being used here as defined in ISO 14001.

INVENTORY PERIOD: A consistent period over which physical Bonsucro certified product and sustainability data is reconciled. Unallocated sustainability data may be carried over to the next inventory period following mass balance rules. This period must not exceed three months.

FINISHED PRODUCT: A finished product is a product where no further modification occurs (including repacking).

MASS BALANCE: A system for administratively monitoring the inputs and outputs of certified material/product throughout the supply chain. It allows for mixing of these materials/products at any stage in the supply chain, provided that the outputs of certified material/product do not exceed the inputs of certified material/products. Material conversion rates need to be included.

MULTIPLE SITES: A group of sites that have a contractual link, a defined Central Office and a minimum of two participating sites. Such sites may be groups of refineries, food processors, etc, brought together under a Central Office and administered using an Internal Control System (ICS). Central Offices that also physically handle and/or process Bonsucro certified product or sustainable data are counted as both Central Office and a participating site.

REPORTING PERIOD: This will be one year, starting from certification date, unless otherwise agreed.

SITE: A single functional part of an economic operator's operations or a combination of parts situated at one locality, eg. sugarcane mill, terminal, food processing facility, storage, tanks.

SUPPLIER: Previous legal owner of the product in the Chain of Custody.

SUSTAINABILITY CHARACTERISTICS: States or properties as a means of judging whether or not a sustainability principle has been fulfilled. (Source: CEN/TC383)

TRACEABILITY: The ability of each economic operator in the chain of custody to trace sustainability criteria one step back to the supplier and one step forward to the client

Symbols and Abbreviations	
CoC	CHAIN OF CUSTODY
G	GRAMS
GHG	GREENHOUSE GAS
HA	HECTARES
HCV	HIGH CONSERVATION VALUE
KG	KILOGRAMS
KJ	KILOJOULES
L	LITRES
MJ	MEGAJOULES
T	METRIC TONNES
Y	YEAR

5. FRAMEWORK FOR AUDITING

5.1 THE BONSUCCRO CERTIFICATION SYSTEM

The Bonsucro Certification System consists of 3 main elements:

1. **Standards:** Bonsucro has developed 2 standards:
 - The “[Bonsucro Production Standard](#)” contains principles and criteria for achieving sustainable production of sugarcane and all sugarcane derived products in respect of economic, social and environmental dimensions.
 - The “[Bonsucro/Bonsucro EU RED Mass Balance Chain of Custody Standard](#)” contains a set of technical and administrative requirements for enabling the tracking of Bonsucro-compliant or Bonsucro EU RED-compliant sugarcane and derived products along the entire supply chain from fields to mill including transportation; through to production (e.g. conversion, processing, manufacturing, transformation), to warehousing, transportation and trade, to the use of sugarcane and all sugarcane derived products.
2. **Guidance for implementation:** Bonsucro has developed guidance documents for members that provide further information on how to become compliant with the Bonsucro Production Standard and/or Chain of Custody Standard.
3. **Certification Protocol:** Bonsucro has developed a Certification Protocol for auditors that lists the process and procedures for certification against the Bonsucro Standards. This includes: 1.) rules and requirements for independent Certification Bodies to audit against the Bonsucro standards, and 2.) audit procedures for independent Certification Bodies to verify compliance with the Bonsucro Standards.

Together, these 3 elements form the Bonsucro Certification System. As such, these individual documents must always be used in relation to each other.

5.2 UNIT OF CERTIFICATION

- Any economic operator who has ownership of Bonsucro/Bonsucro EU RED certified sugarcane products and/or derivatives thereof must be Chain of Custody certified if they want to trade such products or make claim about their activities.
- Retailers and distributors of finished products do not need Chain of Custody certification.

5.3 CERTIFICATION PROCESS

Only after certification (date when the certificate is issued and the economic operator starts to be listed on the “certified members” list of Bonsucro’s webpage) are economic operators allowed to make public claims about their purchase of Bonsucro certified products and/or sell Bonsucro certified products and claim it as such. Any claims must adhere to the Bonsucro Claims and Labelling requirements.

- In order to achieve certification with the Bonsucro Mass Balance CoC Standard, members must have full compliance with all indicators, except for indicator 4.1.2 which is only a requirement for the scope of Bonsucro EU RED Mass Balance CoC Certification.
- The result of the audit will be the possibility of claiming and/or selling a volume of Bonsucro or Bonsucro EU RED certified products, according to the certified volume produced or procured.
- The certification decision will be based on the audit report. Documents showing evidence of compliance with the indicators must be presented by the economic operator to the independent auditors who will verify them during the audit process.
- The audit will be performed according to the frequency defined by Bonsucro in the Certification Protocol.
- The audit must be performed by Bonsucro licensed Certification Bodies.

For more certification requirements see the Bonsucro Certification Protocol

6. BONSUERO MASS BALANCE CHAIN OF CUSTODY STANDARD

PRINCIPLE 1. IMPLEMENTING MASS BALANCE CHAIN OF CUSTODY			
Criterion 1.1. The economic operator must implement the Mass Balance requirements within the scope identified			
Indicator		Standard	Notes
1.1.1	The economic operator must identify the scope of the Mass Balance system.	Y/N	An economic operator may opt for Bonsucro Mass Balance CoC Certification or Bonsucro EU RED Mass Balance CoC Certification.
1.1.2	The economic operator must define the unit of certification, including, in the case of multi-site operators, number of sites and the type of operations covered by the scope of their mass balance Bonsucro/Bonsucro EU RED Mass Balance CoC. An economic operator must implement the mass balance requirements at the level of a single site.	Y/N	
1.1.3	Requirements of the standard apply to all applicable activities outsourced to independent third parties (e.g. subcontracts for storage, transport or other outsourced activities).	Y/N	Where storage is outsourced and is not located at the same geographical location, the economic operator must consider this as a separate site, and the balance of volumes in/out must be applied separately to this site.
1.1.4	The economic operator must have an agreement with its sites requiring appropriate reporting and communication.	Y/N	

Criterion 1.2 The economic operator has a system in place to implement the mass balance requirements			
Indicator		Standard	Notes
1.2.1	The economic operator must have an appointed management representative with overall responsibility and authority for implementation and compliance with all applicable requirements of the Bonsucro/Bonsucro EU RED Mass Balance CoC standard.	Y/N	The management representative can have other roles/functions in addition to implementation of the Bonsucro/Bonsucro EU RED Mass Balance CoC Standard, including responsibility for entering and validating data in the mass balance system at one or more sites.
1.2.2	The economic operator must establish, implement and maintain procedures covering all applicable requirements of the Bonsucro/Bonsucro EU RED Mass Balance CoC. The procedures must be according to the scale and complexity of the economic operator, covering all sites included in the scope.	Y/N	
1.2.3	The economic operator must retain records and reports related to implementation of the Bonsucro/Bonsucro EU RED Mass Balance CoC standard, including purchase and sales documents, production records and volume summaries for at least five (5) years.	Y/N	The records can be of the form of paper documents or can be held electronically.
1.2.4	The economic operator must undertake an annual internal review of performance, including the effectiveness of quality management systems and the compliance of the sites with the requirements of this Bonsucro/Bonsucro EU RED Mass Balance CoC Standard. In case of problems, the economic operator must take appropriate corrective actions.	Y/N	This is separate from the third party surveillance audit.

PRINCIPLE 2. VALIDATING BONSUCCRO DATA

Criterion 2.1 The economic operator must validate the Bonsucro documentation

Indicator		Standard	Notes
2.1.1	The economic operator must check the supplier contract, invoice and supporting documentation to ensure the supplied Bonsucro/Bonsucro EU RED certified product comes from Bonsucro/Bonsucro EU RED certified suppliers, matches the accompanying documentation and includes all information required in Annex 1.	Y/N	Validation is counted from the date on the supplier invoice and/or when supporting documentation is received. This includes checking the validity of the supplier's Bonsucro/Bonsucro EU RED Mass Balance CoC certificate.

PRINCIPLE 3. RECONCILING BONSUCRO DATA			
Criterion 3.1 The economic operator must record and manage the Bonsucro documentation			
Indicator		Standard	Notes
3.1.1	Invoice and/or supporting documentation of incoming Bonsucro/ Bonsucro EU RED certified product must be received and entered into the system within 30 days of physical delivery.	Y/N	
3.1.2	Where applicable, the economic operator must use documented conversion rates in order to calculate the equivalent output weight or volume (at 100% sucrose or ethanol equivalents) associated with the received Bonsucro/BonsucroEU consignment.	Y/N	Methodology for the calculation of conversion factors should be documented. Calculation of conversion factors must take into account the different processing steps involved and spills or losses, to ensure that disproportionate allocation of losses to non-certified product does not occur.
3.1.3	The economic operator must maintain the accuracy of any measuring equipment used.	Y/N	Calibration of metering and weighing equipment in the operations or used by subcontractors for volume or weight input and output should be undertaken as per manufacturer's guidelines.
3.1.4	The volume of the Bonsucro/Bonsucro EU RED certified product received and the associated sustainability characteristics must be recorded in the system, within one week of entering the system, after validity has been confirmed (indicator 2.1.1).	Y/N	One week is counted from the date the product is physically received or ownership is taken, as specified in the procedures. The economic operator may collect data and records and input these at regular intervals (if set out in procedures) rather than as received.

3.1.5	Allocation of Bonsucro/Bonsucro EU RED data must only be to products which are fungible with sugarcane-derived products.	Y/N	<p>For example, data can be allocated to any type of ethanol (e.g. corn, wheat, sugarcane) or any type of sugar (cane, beet), provided they could be mixed (are 'fungible').</p> <p>Bonsucro/Bonsucro EU RED data cannot be allocated to products which can't be made from sugarcane, for example no Bonsucro/Bonsucro EU RED data could be allocated to vegetable oil biodiesel or wheat flour.</p>
3.1.6	The volume of the Bonsucro/Bonsucro EU RED certified product and the associated sustainability characteristics leaving the system must be recorded in the system within one week.	Y/N	<p>One week is counted from the date the Bonsucro/Bonsucro EU RED certified products physically leaves the site or the client takes legal ownership, as specified in the procedures.</p> <p>The economic operator may collect data and records and input these at regular intervals (if set out in procedures) rather than as received.</p>
3.1.7	The economic operator must undertake inventories of the input/output balance of the Bonsucro/Bonsucro EU RED certified product at fixed regular intervals, for each operation site, not exceeding three months.	Y/N	This includes checking the physical stock-keeping and the data stock-keeping, taking into consideration the conversion rates.
3.1.8	The volume of Bonsucro/Bonsucro EU RED certified product received should be greater than or equal to the volume or quantity of Bonsucro/Bonsucro EU RED certified product supplied to clients over a fixed inventory period of maximum three months.	Y/N	This is applied at the site at which the economic operator is applying the mass balance system. The fixed inventory period is determined by the operator and it can be less than three months, to the operator's choice.

3.1.9	Where the balance of inputs and outputs is positive at the end of the economic operator's inventory period, sustainability data may be carried into the next inventory period.	Y/N	If data is carried over, all original information, e.g. initial date of entry into the system, must be maintained.
3.1.10	Sustainability data expires three years from the date of entry into the system or until the end of certification of the economic operator, whichever occurs sooner.	Y/N	If an economic operator does not maintain a valid certificate, then the data not transferred to clients will be considered expired.

PRINCIPLE 4. TRACING BONSUCRO DATA

Criterion 4.1 Sustainability characteristics of consignments are traceable within the economic operator's mass balance system

Indicator		Standard	Notes
4.1.1	Each consignment transacted must be recorded uniquely in the system.	Y/N	Unique identification must be by batch number, product code or other identification method and data as in Annex 1.
4.1.2 (Bonsucro EU RED Chain of Custody only)	Where a combined consignment is supplied to a client, averaging GHG data is not allowed. The original GHG value of each component of the consignment can be allocated to a similar amount of outgoing material. Alternatively, a group consignment can use the worst GHG performance.	Y/N	

PRINCIPLE 5. IDENTIFYING BONSUCRO DATA TO CLIENTS

Criterion 5.1 Sustainability characteristics of consignments are identified to clients

Indicator		Standard	Notes
5.1.1	Each consignment supplied to clients must contain a specification with, at a minimum, the data in Annex 1, clearly specifying the scope of compliance: Bonsucro compliant or Bonsucro EU RED compliant.	Y/N	Specification meeting the minimum data of Annex 1 does not need to be sent with each consignment, if it is included in a contract.
5.1.2	Invoice and/or supporting documentation of outgoing Bonsucro/ Bonsucro EU RED certified product must be sent to the client within 30 days of physical shipment.	Y/N	

7. ANNEXES

ANNEX 1 MINIMUM DATA ASSIGNED TO CONSIGNMENTS FOR BONSUCRO COMPLIANCE

BONSUCRO COMPLIANT PRODUCT:

- Description of the raw material of Bonsucro compliant product (sugarcane or sugarcane residues or wastes)
- The mass (kg or tonnes) or volume (litres or m³)
- Specification of sugar (sugar content in % sucrose) or specification of ethanol (alcohol content in % v/v)
- Evidence showing compliance with the Bonsucro Production Standard
- Buyer and seller contact information
- Transport distance, if relevant for the GHG calculation
- Country of origin (optional)

BONSUCRO EU RED COMPLIANT PRODUCT:

- All of the above
- Country of origin
- Statement about compliance with the Bonsucro EU RED Production Standard
- Actual GHG values [kg CO₂eq] per quantity of sustainable product [in tons or m³ at 15°C] calculated according to the Annex V of the EU Renewable Energy Directive (2009/28/EC), using any EC-approved GHG calculation tool or GHG default values provided in point D of the same annex V of the EU Directive.