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BON SUCRO

The global sugarcane platform

BONSUCRO/BONSUCRO EU RED MASS BALANCE COC STANDARD

Acknowledgement

The Bonsucro Secretariat would like to express their gratitude to the participants of the Standard Revision Taskforce (SRT)* who have dedicated time, knowledge and passion to this project. Without their guidance, advice and decisions, the Bonsucro/Bonsucro EU RED Mass Balance Chain of Custody Standard and Guidance would not have been achieved the expected improvement and relevance. The Secretariat also thanks their companies who have allowed their employees to share their resources with Bonsucro.

The Secretariat would like to thank all stakeholders, including members of Bonsucro and licensed Certification Bodies, who have shared their experience and knowledge with the SRT and ensure the resulting Standard and Guidance are in line with the reality of the industry.

** Members of the Standard Revision Taskforce:*

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London, 17th October 2015

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1. Introduction

1.1 Bonsucro

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 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 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 Mass Balance CoC Standard and Guidance. All meeting minutes are publicly available on the Bonsucro website.

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
Draft version 4.1	June 2015	Second draft open for public consultation
Draft version 4.2	September 2015	Final draft published for vote by members
Version 4.0	May 2016	Revision in light of amendments to RED and FQD, as described in Directive 2015/1513
Version 4.1	August 2016	Revision in light of amendments to RED and FQD, as described in Directive 2015/1513
Version 4.1.1 Draft	September - December 2016	Revision in light of amendments to RED and FQD, as described in Directive 2015/1513

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 September 2020.

In compliance with EU RED, version 4.5 becomes effective from the date of its publication.

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

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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), amendments included in Directive 2015/1513 and additional communication from the European Commission (Com 2010/C 160/02 and BK/gs/ener.c.1(2014)3648524).

Bonscuro or Bonscuro EU claims cannot be attached to any product certified by any other scheme.

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) , amendments included in Directive 2015/1513 and additional communication from the European Commission (Com 2010/C 160/02 and BK/gs/ener.c.1(2014)3648524).

In the context of a voluntary scheme, the Commission can recognise rules related to wastes and residues for the purposes of whether or not:

- biofuels from a certain feedstock have to demonstrate compliance with the land use criteria (Article 17(1));
- certain feedstocks can be considered to have zero GHG emissions to the point of collection (Annex V, Part C, 18).

3. Referenced Publications

- Guidance to the Bonsucro Mass Balance Chain of Custody Standard v4.1
- Bonsucro Production Standard v4.2 September 2014
- Bonsucro Certification Protocol v4.2 September 2011
- Bonsucro Calculator v4.1.1 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
- EU Directive 2015/1513 of the European Parliament and of the Council of 9 September 2015 amending Directive 98/70/EC relating to the quality of petrol and diesel fuels and amending Directive 2009/28/EC on the promotion of the use of energy from renewable sources.
- 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

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

Agriculture Residues: Agricultural residues are generated directly from sugarcane agriculture (e.g. leaves, thrashes, tops, stumps, roots). They do not include residues from related industries or processing, with the exception of sugarcane bagasse, which is considered as an agricultural residue, as per Annex V, part C, point 18 of EU RED (2009/28/EC).

Biofuel: Liquid or gaseous fuel for transport produced from biomass.

Bioliquid: Liquid fuel for energy purposes other than for transport, including electricity and heating and cooling, produced from biomass.

Biomass: 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.

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 - Organization 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.

(Adapted from EU RED), the mass balance system:

a) allows consignments of raw material, sugar, biofuel or residues with differing sustainability characteristics to be mixed;

b) requires information about the sustainability characteristics and sizes of the consignments referred to in point (a) to remain assigned to the mixture; and

(c) provides for the sum of all consignments withdrawn from the mixture to be described as having the same sustainability characteristics, in the same quantities, as the sum of all consignments added to the mixture.

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.

Processing Residues: A processing residue is 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.

Reporting period: This will be one year, starting from certification date, unless otherwise agreed.

Site: (Adapted from EU RED) A site is defined as a geographical location with precise boundaries within which products can be mixed (Source: EC 2010/C 160/1) eg. sugarcane mill, terminal, food processing facility, storage, tanks.

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

Sustainability characteristics: Sustainability characteristics refer to whether or not a consignment of sugarcane, sugar, bagasse and any other product derived from sugarcane, sugarcane residues or sugarcane waste, comply partly or fully with Bonsucro environmental, social and economic criteria, including specific EU RED criteria.

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.

Waste: In the context of the EU RED, waste can be understood as any substance or object which the holder discards or intends or is required to discard. Raw materials that have been intentionally modified, or contaminated, to count as waste (e.g. by adding waste material to a material that was not waste) are not covered by this definition.

See also: Article 3(1) of Directive 2008/98/EC of the European Parliament and of the Council.

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 Bonsucro Certification System

The Bonsucro Certification System consists of three main elements:

1. Standards: Bonsucro has developed two 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 three 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 distributers 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 4.1.3 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. Bonsucro Mass Balance Chain of Custody (CoC) 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. Whenever more than one legal entity operates on a site, each legal entity is required to operate its own mass balance.	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.
1.2.5	The economic operator must ensure that the raw material and derived intermediary products and final biofuel are clearly identified and that no Bonsucro EU compliant material is intentionally modified or discarded to be considered as a waste or residue, including through deliberate modification of the production process.	Y/N	In the mass balance system, consignments containing sugarcane, sugar, straw, bagasse must be accounted for separately. Consignments of ethanol based on sugar, bagasse or straw must be accounted for separately.

Principle 2. Validating Bonsucro 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. No incoming material certified under other schemes can be considered as Bonsucro/Bonsucro EU RED compliant.

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 shall 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 shall 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	Whenever multiple sugarcane-derived products are produced at a given step in the sugarcane supply chain (e.g. mill), sustainability characteristics shall be attributed to all materials equally, with the exception of GHG emissions, which are allocated on an energy basis (See Bonsucro Production Standard – Annex 3).	Y/N	Examples of multiple products include: • Juice and bagasse, following the crushing of sugarcane; • Sugar and molasses, following the refining of sugarcane juice; • Ethanol and vinasse, following the fermentation of molasses.
3.1.6	Allocation of Bonsucro/Bonsucro EU RED data must only be to products which are fungible with sugarcane-derived products.	Y/N	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'). 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.
3.1.7	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	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. The economic operator may collect data and records and input these at regular intervals (if set out in procedures) rather than as received.

3.1.8	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.
3.1.9	The volume of Bonsucro/Bonsucro EU RED certified product received shall 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.
3.1.10	Where the balance of inputs and outputs is positive a the end of the economic operator's inventory period, sustainability data may be carried into the next inventory period. EU RED Only: The amount of sustainability data carried over must correspond to the amount of physical stock held at a site at the end of the inventory period.	Y/N	If data is carried over, all original information, e.g. initial date of entry into the system, must be maintained.
3.1.11	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	
4.1.3 **(Bonsucro EU RED Chain of Custody only)**	Each consignment transacted shall contain information on GHG emissions, including accurate data on all relevant elements of the emission calculation formula. In case actual values are not used, information on the amount of GHG emissions shall not be transmitted through the chain of custody before the last processing step. If at any point of the chain of custody emissions have occurred and are not recorded, so that the calculation of an actual value is no longer feasible for operators downstream in the chain of custody, this must be clearly indicated in the delivery notes.	Y/N	When default values are used, information on GHG emissions should be only reported for final biofuels and can be reported as an aggregate. When actual values are calculated, 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 el and eee.

4.1.4 **(Bonsucro EU RED Chain of Custody only)**	When using actual values, at each step of the chain of custody, GHG emission estimates shall be added to the GHG value included in the documentation to the consignment purchased from the previous operator in the chain of custody. Bioethanol producers shall convert the total GHG emissions into g CO2eq/MJ and calculate GHG savings as: SAVING = $(E_F-E_B)/E_F$ Where E_B = total GHG emissions from bioethanol E_F = total GHG emissions from fossil fuel comparator (83.8 g CO2eq/MJ)	Y/N	The following GHG emissions shall be considered: a. Additional emissions from transport and/or processing have to be added to ep and or etd respectively. b. Energy losses occurred during processing or if relevant transportation or storage have to be taken into account using a 'feedstock factor'. c. Whenever a processing step yields co-products, emissions need to be allocated using an 'allocation factor' following the rules set out in the GHG emission calculation methodology. d. At the last processing step the emission estimate needs to be converted into the unit g CO2eq/MJ of final biofuel.

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. Annex

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 m^3)
- 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
- Specification of original raw material or intermediary product:

    Sugarcane

    Sugarcane juice

    Sugarcane molasses

    Sugarcane bagasse

    Sugarcane straw

    Sugarcane thrashes (tops, leaves, roots)

- Country of origin
- Date of installation of operations
- Statement about compliance with the Bonsucro EU RED Production Standard
- Whenever actual GHG values are used, the actual GHG values [kg CO2eq] per dry tons (sugarcane, sugar, molasses, bagasse and other intermediary products) or per MJ (bioethanol) calculated according to the Annex V of the EU Renewable Energy Directive (2009/28/EC), Annex IV of the EU Fuel Quality Directive (2009/30/EC), and Annex II of Directive 2015/1513 and EC Note BK/abd/ener.c.1(2015)4507918, using any EC-approved GHG calculation tool. See also Annex 3 of Bonsucro Production Standard for more details.
- Accurate data on all relevant elements of the emission calculation formula, i.e. e_{ec}, e_l, e_p,e_{td} and e_{ee}.
- If at any point of the chain of custody emissions have occurred and are not recorded, so that the calculation of an actual value is no longer feasible for operators downstream in the chain of custody, this must be clearly indicated in the delivery notes.
- Whenever default GHG values are used, the mention “default value”, with the exception of bioethanol producer, who shall indicate the default value as per EU RED Annex V and the corresponding GHG savings, compared to the fossil reference.