

## Bonsucro EU RED Standard Changes Summary Comparison of 'new' and 'old' Bonsucro EU-RED requirements

Version 1 approved on 29<sup>th</sup> June 2021

The new Bonsucro EU-RED Standard (2021) defines how, under certain conditions, sugar cane millers and their supplying area as well as supply chain operators are able to comply with the requirements in the EU Directive 2018/2001/EC on the promotion of the use of energy from renewable sources (recast). This Directive (commonly referred to as 'EU-RED2' or 'REDII') specifies sustainability requirements for biofuels, bioliquids and biomass fuels in the European Union. Refer to <u>DIRECTIVE (EU) 2018/ 2001</u> for the Directive and to <u>Voluntary schemes | Energy (europa.eu)</u> for more information on how voluntary schemes such as the Bonsucro EU-RED Standard can be used to show compliance with REDII sustainability requirements

The requirements in the new Bonsucro EU-RED Standard replace requirements under Principle 6 of the Bonsucro Production Standard V4.2 and requirements in the Bonsucro EU-RED Mass Balance Chain of Custody Standard (Version 5.1). The latter two documents previously allowed compliance with requirements in the (previous) EU Renewable Energy Directive (2009/28/EC) and revised Fuel Quality Directive (2009/30/EC)'.

This document summarizes the requirements of the new Bonsucro EU-RED Standard for mills and for the supply chain, and specifies which old requirements are replaced (i.e. no longer applicable) and where there are relevant differences between the new and old requirements. This document is a summary only, and is not an exhaustive list of all detailed changes. Bonsucro EU-RED certified operators and its certification bodies are recommended to always study the Bonsucro EU-RED Standard for full information.

Note: When the text in this document makes reference to the 'Bonsucro EU-RED requirements for producers' or the 'Bonsucro EU-RED ChoC requirements' it means the requirements specified in the new Bonsucro EU-RED Standard, and <u>not</u> the requirements in the Bonsucro Production Standard V4.2 or the Bonsucro EU-RED Mass Balance Chain of Custody Standard (Version 5.1).

REQUIREMENTS IN NEW BONSUCRO EU-RED STANDARD (JUNE 2021 –	REQUIREMENTS WHICH	CHANGES BETWEEN NEW AND OLD
DRAFT)	HAVE BEEN REPLACED	REQUIREMENTS
Scope of the Bonsucro EU-RED Standard	BS EU-RED Choc	Scope of new EU-RED Standard has
The Bonsucro EU-RED Standard covers the cultivation and processing of	'Introduction' section	been extended to cover also biomas
sugarcane to produce biofuels, bioliquids and biomass fuels for use in the EU,		fuels (alongside biofuels and
including all related processing, transportation and storage activities.		bioliquids):
		Biomass fuels: gaseous and solid
More specifically, it covers the cultivation and processing of sugarcane to		fuels produced from biomass.
produce:		Bioliquid: liquid fuel for energy
1. first-generation ethanol (1G ethanol) produced by fermentation of		purposes other than for transport,
sugarcane juice;		including electricity and heating and
2. first-generation ethanol (1G ethanol) produced from molasses;		cooling, produced from biomass.
3. second-generation ethanol (2G ethanol) produced from bagasse;		<b>Biofuels:</b> liquid fuel for transport
4. (solid) biomass fuels produced from bagasse.		produced from biomass.
		•
The Bonsucro EU-RED Standard applies globally.		Waste & residues are not included
		in the scope of new Bonsucro EU-
Agricultural residues from sugarcane cultivation are not in the scope of		RED Standard, with the exception of
Bonsucro EU-RED. Processing waste and processing residues are not in the		bagasse and products derived from
scope of Bonsucro EU-RED, with the exception of bagasse which is included in		bagasse.
the scope (N.B. Under REDII, bagasse is considered a processing residue and		
not an agricultural residue).		
Indicator EU 1.1: Options for the greenhouse gas criterion for biofuels,	BS Production Standard	A number of default values and
bioliquids and biomass fuels (mills)	V4.2, Indicator 6.1.1	disaggregated default values have
Mills shall use one of the following options for the greenhouse gas criterion		been changed. Default values and
for biofuels, bioliguids and biomass fuels:		disaggregated default values for
a. Use of a default value for greenhouse gas emission saving if the		biofuels and bioliquids can be found
production pathway is laid down in Part A or B of Annex V of REDII for		in Annex V of REDII, for biomass
biofuels and bioliguids and in Part A of Annex VI of REDII for biomass		fuels in Annex VI of REDII.
fuels. Default values can only be applied if the el value for those		
biofuels or bioliquids calculated in accordance with point 7 of Part C		Under REDII, there are two GHG
of Annex V of REDII and for those biomass fuels calculated in		calculation methodologies: one for
		biofuels and bioliquids, and one for
		biordels and bioliquius, and one for

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<ul> <li>DRAFT)</li> <li>accordance with point 7 of Part B of Annex VI of REDII is equal or less than zero;</li> <li>b. Use of actual greenhouse gas values to calculate total greenhouse gas savings according to the EU-RED methodology and specified in Part C of Annex V of REDII for biofuels and bioliquids and in Part B of Annex VI of REDII for biomass fuels;</li> <li>c. For biofuels and bioliquids, use of a value calculated as the sum of the formulas referred to in point 1 of Part C of Annex V of REDII may be used for some factors and actual value, calculated in accordance with the methodology laid down in Part B of Annex V of REDII, are used for all other factors;</li> <li>d. For biomass fuels, use of a value calculated as the sum of the formulas referred to in point 1 of Part B of Annex VI of REDII, where disaggregated default values in Part B of Annex V of REDII, are used for all other factors;</li> <li>d. For biomass fuels, use of a value calculated as the sum of the formulas referred to in point 1 of Part B of Annex VI of REDII, where disaggregated default values in Part C of Annex VI of REDII, are used for all other factors;</li> <li>d. For biomass fuels, use of a value calculated as the sum of the formulas referred to in point 1 of Part B of Annex VI of REDII, where disaggregated default values in Part C of Annex VI of REDII, where disaggregated default values in Part C of Annex VI of REDII, where disaggregated default values in Part C of Annex VI of REDII, where disaggregated default values in Part B of Annex VI of REDII, are used for some factors, and actual values, calculated in accordance with the methodology laid down in Part B of Annex VI of REDII, are used for all other factors.</li> <li>Detailed requirements and guidance on the use of default values and actual values have been elaborated in Annex 1 of this Standard.</li> </ul>	HAVE BEEN REPLACED	REQUIREMENTSbiomass fuels. The methodologies have been detailed in Part 3 and Part 4 of Annex I of new Bonsucro EU-RED Standard.Several aspects of the GHG calculation methodology for biofuels and bioliquids have changed, in relation to calculation of 
values have been elaborated in Annex 1 of this Standard.		based on the GHG methodologies in Annex I of the new Bonsucro EU- RED Standard.
Indicator EU 2.1: Primary forest or other wooded land	BS Production Standard 4.2,	'Other primary wooded land'
Biofuels, bioliquids and biomass fuels produced from agricultural biomass	Indicator 6.1.2. Clause (a)	replaced by 'other wooded land'
shall not be made from raw material obtained from land that was primary forest or other wooded land in or after January 2008, whether or not the land	under 'land with high biodiversity value'.	
continues to have that status.		

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Primary forest and other wooded land is defined as 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.		'Other wooded land of native species' replaced by 'other wooded land'
Indicator EU 2.2: Highly biodiverse forest or other wooded land Biofuels, bioliquids and biomass fuels produced from agricultural biomass shall not be made from raw material obtained from land that was highly biodiverse or other wooded land in or after January 2008, whether or not the land continues to have that status. Highly biodiverse forest and other wooded land is defined forest and other wooded land which is species-rich and not degraded, or has been identified as being highly biodiverse by the relevant competent authority, unless evidence is provided that the production of that raw material did not interfere with those nature protection purposes.	No reference	This is a new requirement. Definitions of 'highly biodiverse', 'species-rich' and 'degraded' have been included in Section 2 of the new Bonsucro EU-RED Standard.
Indicator EU 2.3: Protected areasBiofuels, bioliquids and biomass fuels produced from agricultural biomassshall not be made from raw material obtained from land that was a protectedarea in or after January 2008, whether or not the land continues to have thatstatus.This includes areas designated:i)by law or by the relevant competent authority for nature	BS Production Standard, Indicator 6.1.2, clause (b) under 'land with high biodiversity value'	No changes.
<ul> <li>by law or by the relevant competent authority for nature protection purposes; or</li> <li>ii) 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 International Union for the Conservation of Nature, subject to their recognition in accordance with the second subparagraph of Article 30(4) of REDII .</li> </ul>		

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	exception is possible if evidence is provided that the production of that material did not interfere with those nature protection purposes.		
Indicato	or EU 2.4: Highly biodiverse grassland	BS Production Standard,	The new requirement references
	, bioliquids and biomass fuels produced from agricultural biomass	Indicator 6.1.2, clause (c)	Regulation (EU) No 1307/2014,
	t be made from raw material obtained from land that was highly	under 'land with high	which includes guidance in relation
	se grassland spanning more than one hectare in or after January	biodiversity value'	to the requirement on highly
2008, w	hether or not the land continues to have that status.		biodiverse grassland and shall be taken into account when assessing
Highly b	iodiverse grassland is defined as:		new Indicator EU 2.4.
i)	natural, namely grassland that would remain grassland in the		
	absence of human intervention and which maintains the natural		Chapter 6 of the new Bonsucro EU-
	species composition and ecological characteristics and processes;		RED Standard includes specific
	or		requirements for auditors
ii)	non-natural, namely grassland that would cease to be grassland in		performing assessments of highly
	the absence of human intervention and which is species-rich and		biodiverse grasslands.
	not degraded and has been identified as being highly biodiverse		
	by the relevant competent authority, unless evidence is provided		
	that the harvesting of the raw material is necessary to preserve its		
	grassland status.		
In the co	ontext of this requirement the definitions in Chapter 2 for 'grassland',		
	intervention', 'degraded' and 'species rich' apply. These definitions		
	he definitions laid down in Regulation (EU) No 1307/2014.		
The follo	owing approach must be taken when determining whether land is (or		
	ase of conversion was) natural highly biodiverse grassland:		
	• The lead auditor must judge whether an assessment of highly		
	biodiverse grassland is necessary.		
	• If an assessment is necessary, it must be conducted by a qualified		
	independent specialist who may be additional to the audit team.		

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The assessment and result must then be reviewed as part of the audit. Refer to Chapter 6 for auditor requirements.		
<ul> <li>Indicator EU 3.1: Wetlands</li> <li>Biofuels, bioliquids and biomass fuels produced from agricultural biomass shall not be made from raw material obtained from land that was wetland in January 2008 and no longer has that status.</li> <li>A wetland is land that is covered with or saturated by water permanently or for a significant part of the year. Evidence of verification should reflect seasonal changes within a year.</li> </ul>	BS Production Standard 4.2, Indicator 6.1.2. Clause (a) under 'land with high carbon stock'.	Addition to the new requirement: 'Evidence of verification should reflect seasonal changes within a year.'
These provisions shall not apply if, at the time the raw material was obtained, the land had the same status as it had in January 2008.		
Indicator EU 3.2: Continuously forested areas Biofuels, bioliquids and biomass fuels produced from agricultural biomass shall not be made from raw material obtained from land that was continuously forested in January 2008 and no longer has that status. Continuously forested areas are defined as land spanning more than one hectare with trees higher than five metres and a canopy cover of more than 30%, or trees able to reach those thresholds in situ. 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 agroforestry systems when crops are grown under tree cover.	BS Production Standard 4.2, Indicator 6.1.2. Clause (b) under 'land with high carbon stock'.	No changes
These provisions shall not apply if, at the time the raw material was obtained, the land had the same status as it had in January 2008.		

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<ul> <li>Indicator EU 3.3: Forested land with 10-30% canopy cover</li> <li>Biofuels, bioliquids and biomass fuels shall not be made from raw material obtained from land that was forested with 10-30% canopy cover in January 2008 and no longer has that status.</li> <li>Forested areas with 10-30% canopy cover are defined as land spanning more than one hectare with trees higher than five metres and a canopy cover of between 10% and 30%, or trees able to reach 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 REDII is applied, the greenhouse gas threshold as specified in Section 1 of Annex I would still be fulfilled.</li> <li>These provisions shall not apply if, at the time the raw material was obtained, the land had the same status as it had in January 2008.</li> </ul>	BS Production Standard 4.2, Indicator 6.1.2. Clause (c) under 'land with high carbon stock'.	For the new requirement, the new GHG methodology shall be used (as specified in Annex I of the Bonsucro EU-RED Standard)
<ul> <li>Indicator EU 4.1: Peatland</li> <li>Bio fuels, bioliquids and biomass fuels produced from agricultural biomass shall not be made from raw material obtained from land that was peatland in January 2008.</li> <li>An exception is possible if evidence is provided that the cultivation and harvesting of that raw material does not involve drainage of previously undrained soil. For peatland that was partially drained in January 2008, a subsequent deeper drainage, affecting soil that was not fully drained, would constitute a breach of the criterion.</li> </ul>	BS Production Standard 4.2, Indicator 6.1.2. Clause (c) under 'land with high carbon stock'.	The following clarification is added to the new requirement: 'For peatland that was partially drained in January 2008, a subsequent deeper drainage, affecting soil that was not fully drained, would constitute a breach of the criterion'.
Indicator EU 5.1: Overall management responsibility The economic operator shall establish and document its commitment to implement and maintain the Bonsucro EU-RED ChoC requirements. The	BS EU-RED ChoC Standard, V5.1. Indicator 1.1.1.	No changes.

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commitment of the economic operator shall be made available to its personnel, suppliers, clients and other stakeholders.		
<ul> <li>Indicator EU 5.2: Procedures</li> <li>The economic operator shall have written procedures and/or work instructions or equivalent to ensure the implementation of all elements of the Bonsucro EU-RED ChoC requirements. This shall include at minimum the following: <ul> <li>Complete and up to date procedures covering the implementation of all the elements of the supply chain model requirements.</li> <li>Complete and up to date records and reports that demonstrate compliance with the supply chain model requirements (including training records).</li> <li>Identification of the role of the person(s) having overall responsibility for and authority over the implementation of these requirements and compliance with all applicable requirements. This person(s) shall be able to demonstrate awareness of the economic operator's procedures for the implementation of this standard.</li> </ul> </li> </ul>	BS EU-RED ChoC Standard, V5.1. Indicator 1.1.2.	No changes.
<ul> <li>Indicator EU 5.3: Record keeping and reporting to EC</li> <li>The economic operator shall maintain accurate, complete, up-to-date and accessible records and reports covering all aspects of the Bonsucro EU-RED ChoC requirements. Retention times for all records and reports shall be a minimum of five (5) years.</li> <li>This includes e.g. but is not limited to purchase and sales documents, production records and volume summaries, records of internal procedures and changes thereof, records on training of personnel, records of internal audits. The system for recording data and documents (e.g. software) shall be adequate to the complexity of the economic operator.</li> </ul>	BS EU-RED ChoC Standard, V5.1. Indicator 1.1.3.	Under the new requirement 'Economic operators shall enter all requested information in the Union database as soon as the database starts operation.' This database has not yet been operationalized. BS will communicate additional guidance when EC has made this available.

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Economic operators shall enter all requested information in the Union database as soon as the database starts operation (refer to Section 7.5).		Please note that the 'guidance' section under Indicator 1.1.3 in the 'old' EU-RED ChoC Standard V 5.1. has been included in the requirements in Indicator EU 5.3 in the new Bonsucro EU-RED Standard.
Indicator EU 5.4: Training The economic operator shall have a training plan covering Bonsucro EU-RED ChoC requirements, which is subject to on-going or at least annual review. Appropriate training shall be provided by the economic operator for personnel carrying out the tasks critical to the effective implementation of the EU-RED ChoC requirements. Training shall be specific and relevant to the task(s) performed. Records of participants and content shall be maintained.	BS EU-RED ChoC Standard, V5.1. Indicator 1.1.4.	No changes.
<ul> <li>Indicator EU 5.5: Internal audits</li> <li>The economic operator shall conduct an annual internal audit to determine whether the organization: <ul> <li>Conforms to the requirements in the Bonsucro EU-RED ChoC Standard.</li> <li>Effectively implements and maintains the standard requirements within its organisation. Any non-conformities found as part of the internal audit shall direct corrective actions to be taken. The outcomes of the internal audits and all actions taken to correct nonconformities shall be subject to management review at least annually. The economic operator shall maintain the internal audit records and reports.</li> <li>Corrective actions taken as a result of any nonconformities identified in the internal audit shall be documented, including dates and descriptions of actions taken to resolve them.</li> </ul> </li> <li>The procedure for the annual internal audit process shall be documented.</li> </ul>	BS EU-RED ChoC Standard, V5.1. Indicator 1.1.5.	No changes.

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Indicator EU 5.6: Defining the unit of certification	BS EU-RED ChoC Standard,	No changes.
Under Bonsucro EU-RED ChoC an economic operator has two options for its	V5.1. Indicator 1.1.6.	
chosen unit of certification. These are:		Please note that the 'guidance' section under Indicator 1.1.6 in the
<ol> <li>Single site: a single functional part of an economic operator's</li> </ol>		'old' EU-RED ChoC Standard V 5.1.
operations or a combination of parts situated at one locality, e.g.		has been included in the
sugarcane mill, terminal, food processing, storage, tanks.		requirements in Indicator EU 5.6 in the new Bonsucro EU-RED Standard.
2. Multi-site: More than one location either within a single legal entity or		
across legal entities that are related via an ownerships structure (e.g.		
common holding company). The following conditions apply		
a. Each site in a multi-site certificate shall maintain its own mass		
balance calculations and records. Mass Balance volumes shall not be transferred between sites.		
b. Multi-site as a unit of certification for facilities that do any		
processing or transformation is not permitted.		
c. Multi-site auditing for storage/tanks or any other holding		
facility is permitted, provided that the sites follow a common		
Internal Control System (ICS) and that the Central Office is always subject to audit.		
d. One site shall be designated as responsible for maintaining		
the central administration of the ChoC requirements including		
the individual site mass balance accounting using an Internal		
Control System (ICS). This site is designated as the Central		
Office.		
The economic operator shall define and document its unit(s) of certification.		
If more than one legal entity operates on a site then each legal entity shall		
operate its own mass balance and comply with all Bonsucro EU-RED ChoC requirements.		

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In the case of multi-site certification, the economic operator shall define and document the legal entities and sites covered by the multi-site Bonsucro EU-RED ChoC certificate, including details on the site designated as the Central Office for administering Bonsucro EU-RED ChoC data. The relationship between the sites shall be described and documented. The economic operator shall document any changes that may occur in the scope of the unit(s) of certification, and notify its certification body at least one week before the change goes into effect. All operators wishing to use multi-site certification under Bonsucro EU-RED requirements, shall be subject to the following sampling formula for the minimum number of site visits required for initial assessment audits: Square root of the total number of sites, rounded up to a whole number for each set of assessments (audits), plus Central Office. The applicable multi-site sampling formulas shall be used as a minimum, and may be increased depending on the complexity and risk associated with the		
operations (depending on the auditor's professional judgement).		
Indicator EU 5.7: Outsourcing activities In cases where a Bonsucro EU-RED ChoC certified economic operator outsources activities to independent third parties (e.g. subcontractors for storage, transport or other outsourced activities), the certified economic operator shall ensure that the independent third party complies with the Bonsucro EU-RED ChoC requirements. It is not required to list the contractors performing outsourced activities on the certificate of the Bonsucro certified economic operator.	BS EU-RED ChoC Standard, V5.1. Indicator 1.1.7.	No changes.
This requirement is not applicable to outsourced storage facilities where the management of the Bonsucro certified product(s) and instructions for tank		

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movements are controlled by the certified economic operator (not the tank farm manager).		
<ul> <li>A Bonsucro EU-RED certified economic operator which includes outsourcing within the scope of their Bonsucro EU-RED ChoC certificate shall ensure the following: <ul> <li>The certified economic operator has legal ownership of all input material to be included in outsourced processes;</li> <li>The certified economic operator has an agreement or contract covering the outsourced process with each contractor through a signed and enforceable agreement with the contractor. The certified economic operator or operation if an audit is deemed necessary, including all necessary documentation. If this is not possible, the outsourced contractor shall obtain a Bonsucro EU -RED ChoC certificate independently.</li> <li>The economic operator has a documented control system with explicit procedures for the outsourced process which is communicated to the relevant contractor.</li> <li>The economic operator shall record the names and contact details of all contractors used for the processing or physical handling of Bonsucro EU-RED certified products. An up to date record shall be made available to the economic operators certification body at its next audit.</li> </ul> </li> </ul>		
Indicator EU 6.1: Verification of Bonsucro EU-RED status of the supplier The receiving economic operator shall verify the current Bonsucro EU-RED status of the supplier at the time of the purchase. No incoming material certified under other schemes can be considered as Bonsucro EU-RED compliant. Incoming material which does not comply with the Bonsucro EU- RED Standard and/or is from a supplier that is not Bonsucro EU-RED certified shall not be considered as Bonsucro EU-RED compliant.	BS EU-RED ChoC Standard, V5.1. Indicator 2.1.1.	No changes. Please note that the 'guidance' section under Indicator 2.1.1 in the 'old' EU-RED ChoC Standard V 5.1. has been included in the

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This requirement includes checking the validity of the supplier's Bonsucro EU- RED ChoC certificate. All Bonsucro EU-RED certified entities and certificate numbers are displayed on the Bonsucro website. In cases of uncertainty, the Bonsucro secretariat must be contacted for clarification. No incoming material certified under other schemes can be considered as Bonsucro EU-RED compliant.		requirements in Indicator EU 6.1 in the new Bonsucro EU-RED Standard.
<ul> <li>Indicator EU 6.2: Verification of data of the incoming Bonsucro EU-RED certified product</li> <li>The receiving economic operator shall verify that the supplier contract, invoice and/or supporting documentation, including associated sustainability characteristics of consignments of Bonsucro EU-RED certified products meet the following requirements: <ul> <li>Specification of original raw material or intermediary product: Sugarcane, Sugarcane juice, Sugarcane molasses, Sugarcane bagasse.</li> <li>The mass (kg or tonnes) or volume (litres or m<sup>3</sup>).</li> <li>Specification of sugar (sugar content in % sucrose), molasses for fermentation (% Brix), or specification of ethanol (alcohol content in % v/v) or for any other derived products the appropriate measure of purity.</li> <li>Evidence showing compliance with the Bonsucro EU-RED requirements, meaning that the supplier holds a valid Bonsucro EU-RED certificate.</li> <li>Buyer and seller contact information.</li> <li>Country of origin, i.e. the country where the sugar cane was grown.</li> <li>Date when biofuel, bioliquid or biomass fuel installation started operations. This refers to the date on which the installation that produces the biofuels, bioliquids of biomass fuels first became operational. The term 'installation' includes any processing</li> </ul> </li> </ul>	BS EU-RED ChoC Standard, V5.1. Indicator 2.1.2.	Under the new requirement, GHG information shall be based on REDII GHG requirements (specified in Annex I of Bonsucro EU-RED Standard and Annex V and VI of REDII. Under the new requirement, additional information shall be provided 'on support which has been received for the production of the material including details on the type of support scheme'. Please note that the 'guidance' section under Indicator 2.1.2 in the 'old' EU-RED ChoC Standard V 5.1. has been included in the requirements in Indicator EU 6.2 in the new Bonsucro EU-RED Standard.

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installation used in the sugar, sugarcane, ethanol or bagasse biomass		
fuel production process. This does not include production facilities		
that might have been intentionally added to the production chain		
only to qualify for the exemption foreseen in this provision.		
Whenever actual GHG values are used, the actual GHG values in kg		
$CO_{2-eq}$ per dry tons (sugarcane, sugar, molasses, bagasse and other		
intermediary products) or g $CO_{2-eq}$ per MJ ( biofuel or biomass fuel:		
bioethanol, bagasse pellets) calculated according to the Annex V of		
REDII (biofuels) or annex VI of REDII (biomass fuels). See also Annex I of this Standard for more details.		
<ul> <li>Accurate data on all relevant elements of the GHG emission</li> </ul>		
calculation formula (i.e. e <sub>ec</sub> , e <sub>l</sub> , e <sub>p</sub> and e <sub>td</sub> ) See also Annex 1 for more details.		
<ul> <li>If at any point in the chain of custody emissions have occurred and are not recorded, so that the calculation of an actual value is no</li> </ul>		
longer feasible for operators downstream in the chain of custody, this		
must be clearly indicated in the delivery notes.		
<ul> <li>Whenever default GHG values are used, the mention of the words</li> </ul>		
'default value', with the exception of bioethanol producer, who shall		
indicate the default value as per REDII Annex V or REDII Annex VI and		
the corresponding GHG savings, compared to the fossil reference.		
<ul> <li>Information on support which has been received for the production of</li> </ul>		
the material including details on the type of support scheme (only		
relevant if support has been received).		
relevant il support nas been received).		
All the data shall be entered into the receiving economic operator's		
administrative system within one month of taking ownership.		
administrative system within one month of taking ownership.		
In case of discrepancies between the documentation and the material		
received, the receiving economic operator shall contact its supplier and		
require for data correction. Corrected data shall be received and entered into		

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the receiving economic operator's administrative system before sustainability		
data is passed on to the next economic operator.		
Multiple receipts with common supplier and with identical Bonsucro EU-RED		
sustainability characteristics may administratively be combined as one batch		
for reporting purposes.		
Indicator EU 6.3: Conversion rates	BS EU-RED ChoC Standard,	No changes.
A conversion rate describes the change in quantity of a specific material that	V5.1. Indicator 2.1.3.	
occurs due to processing of the respective material at a specific site.		
Conversion rates and the resulting changes of quantities shall be site-specific		
and specific for a defined feedstock/product conversion. Conversion rates		
shall be based on actual data (e.g. processing or production data). The output		
weight or volume after conversion shall be expressed as 100% sucrose or		
ethanol equivalents.		
Conversion rates used shall be documented and are subject to verification during the audit.		
Conversion rates shall be provided by any economic operator that modifies its		
inputs in any way. This applies to all the elements of the chain of custody each		
time such a change in quantity occurs.		
In the case of multi-site certificates the designated Central Office shall keep		
records of conversion rates realized at each site included in the multi-site		
certificate and for all products processed on those sites.		
Indicator EU 6.4: Mixing of Bonsucro certified products with products	BS EU-RED ChoC Standard,	No changes.
fungible with sugarcane-derived products	V5.1. Indicator 2.1.4.	
In every case where a batch of Bonsucro EU-RED certified product was		
physically mixed with other products which are fungible with sugarcane-		
derived products, the Bonsucro EU-RED data may be allocated to any physical		

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consignment taken from that batch, provided that input and output of Bonsucro EU-RED data match (no overclaiming of Bonsucro EU-RED data). (For example: ethanol from corn is fungible with ethanol from sugarcane, as these products can be mixed without losing their original characteristics. For example biodiesel is not fungible with sugarcane ethanol.)		
<ul> <li>Indicator EU 6.5: Supply of Bonsucro EU-RED certified product</li> <li>The economic operator shall ensure that the delivery contract, invoice and/or supporting documentation, including associated sustainability characteristics of consignments of Bonsucro</li> <li>EU-RED certified products meet the following requirements: <ul> <li>Specification of original raw material or intermediary product: Sugarcane, Sugarcane juice, Sugarcane molasses, Sugarcane bagasse, Sugarcane straw, Sugarcane thrashes (tops, leaves, roots).</li> <li>The mass (kg or tonnes) or volume (litres or m<sup>3</sup>).</li> <li>Specification of sugar (sugar content in % sucrose), molasses for fermentation (% Brix), or specification of ethanol (alcohol content in % v/v) or for any other derived products the appropriate measure of purity.</li> <li>Evidence showing compliance with the Bonsucro EU-RED requirements, meaning that the supplier holds a valid Bonsucro EU-RED certificate.</li> <li>Buyer and seller contact information.</li> <li>Country of origin, i.e. the country where the sugar cane was grown.</li> <li>Date when biofuel, bioliquid or biomass fuel installation started operations. This refers to the date on which the installation that produces the biofuels, bioliquids of biomass fuels first became operational. The term 'installation' includes any processing installation used in the sugar, sugarcane, ethanol or bagasse biomass fuel production process. This does not include production facilities</li> </ul> </li> </ul>	BS EU-RED ChoC Standard, V5.1. Indicator 2.1.5.	Under the new requirement, GHG information shall be based on REDII GHG requirements (specified in Annex I of Bonsucro EU-RED Standard and Annex V and VI of REDII. Under the new requirement, additional information shall be provided 'on support which has been received for the production of the material including details on the type of support scheme'. The new requirement specifies that if the consignment was processed by the supplier, the supplier shall adjust the sustainability and greenhouse gas emissions saving characteristics of the consignment and assign these to the output consignment in accordance with the following rules:'

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<ul> <li>that might have been intentionally added to the production chain only to qualify for the exemption foreseen in this provision.</li> <li>Whenever actual GHG values are used, the actual GHG values in kg CO<sub>2-eq</sub> per dry tons (sugarcane, sugar, molasses, bagasse and other intermediary products) or g CO<sub>2-eq</sub> per MJ (biofuel or biomass fuel: bioethanol, bagasse pellets) calculated according to the Annex V of REDII (biofuels) or Annex VI of REDII (biomass fuels). See also Annex I of this Standard for more details.</li> <li>Accurate data on all relevant elements of the GHG emission calculation formula (i.e. e<sub>ec</sub>, e<sub>i</sub>, e<sub>p</sub>, etd , e<sub>sca</sub>). See also Annex 1 for more details.</li> <li>If at any point in 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.</li> <li>Whenever default GHG values are used, the mention of the words 'default value', with the exception of bioethanol producer, who shall indicate the default value as per REDII Annex V or REDII Annex VI and the corresponding GHG savings, compared to the fossil reference.</li> <li>Information on support which has been received for the production of the material including details on the type of support scheme (only relevant if support has been received).</li> </ul>		Please note that the 'guidance' section under Indicator 2.1.2 in the 'old' EU-RED ChoC Standard V 5.1. has been included in the requirements in Indicator EU 6.2 in the new Bonsucro EU-RED Standard.
<ul> <li>If the consignment was processed by the supplier, the supplier shall adjust the sustainability and greenhouse gas emissions saving characteristics of the consignment and assign these to the output consignment in accordance with the following rules: <ul> <li>a. when the processing of a consignment of raw material yields only one output that is intended for the production of biofuels, bioliquids or biomass fuels, the size of the consignment and the related quantities of sustainability and greenhouse gas emissions saving characteristics</li> </ul> </li> </ul>		

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<ul> <li>shall be adjusted applying a conversion factor representing the ratio between the mass of the output that is intended for such production and the mass of the raw material entering the process;</li> <li>b. when the processing of a consignment of raw material yields more than one output that is intended for the production of biofuels, bioliquids or biomass fuels, for each output a separate conversion factor shall be applied and a separate mass balance shall be used.</li> <li>All the data shall be entered into the supplier's administrative system within one month of transfer of ownership</li> </ul>		
Indicator EU 6.6: Inventory periods The economic operator shall undertake inventories of the input/output balance of the Bonsucro EU-RED certified product at fixed regular intervals, for each operation site, with the intervals not exceeding three months. Fixed inventory periods shall be continuous in time, i.e. gaps between inventory periods shall not occur. During any periods without movement of Bonsucro EU-RED certified material mass balances shall be kept. The inventory periods for the certification period shall be clearly documented at the beginning of the certification term by the economic operator and shall be verified during the audit. For each inventory period a mass balance calculation including sustainability data transfer to the next period (carry over) must be documented and provided during the audit. The inventory shall be undertaken at individual site level.	BS EU-RED ChoC Standard, V5.1. Indicator 2.1.6.	No changes.
Indicator EU 6.7: Balancing Bonsucro EU-RED volumes during and between inventory periods The volume of Bonsucro EU-RED certified product received shall be greater than or equal to the volume of Bonsucro EU-RED certified product supplied to clients over a fixed inventory period of maximum three months.	BS EU-RED ChoC Standard, V5.1. Indicator 2.1.7.	The new requirement explicitly states that: 'The Bonsucro ChoC Standard allows to carry over more sustainability data than there is physical material in stock at the end of any given inventory period. This is

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<ul> <li>Where the balance of inputs and outputs is positive at the end of economic operator's inventory period, sustainability data for the positive balance may be carried into the next inventory period.</li> <li>This is called carry over. Carry over is only possible from one inventory period to the next if at least the equivalent amount of physical material is in stock, as registered in the sustainability data stated in the bookkeeping records. This means it is not possible to have more carry over into the next inventory period than the quantity that is physically in stock at the end of any inventory period.</li> <li>N.B. The Bonsucro ChoC Standard allows to carry over more sustainability data than there is physical material in stock at the end of any given inventory period. This is not allowed under Bonsucro EU-RED requirements.</li> </ul>		not allowed under Bonsucro EU-RED requirements.'
Indicator EU 6.8: Expiration of Bonsucro sustainability data Bonsucro EU-RED sustainability data entered into an economic operator's mass balance system shall no longer be attached to outgoing consignments after one year from the date of entry into the system. Carryover is to be adjusted downward to reflect any expiring date of the material. If the economic operator's Bonsucro EU-RED ChoC certificate is no longer valid, any remaining sustainability data in the economic operator's administrative system becomes invalid.	BS EU-RED ChoC Standard, V5.1. Indicator 2.1.8.	No changes.
Indicator EU 6.9: Attribution of Bonsucro EU-RED sustainability characteristics Whenever multiple sugarcane-derived products are produced at a given step in the sugarcane supply chain (e.g. mill), Bonsucro EU-RED sustainability characteristics shall be attributed to all materials equally with the exception of GHG emissions which shall be allocated on an energy basis (refer to Annex 1).	BS EU-RED ChoC Standard, V5.1. Indicator 2.1.9	Please note that the 'guidance' section under Indicator 2.1.9 in the 'old' EU-RED ChoC Standard V 5.1. has been included in the requirements in Indicator EU 6.9 in the new Bonsucro EU-RED Standard.

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All the sugarcane-derived products produced at a given step shall carry the		
same sustainability characteristics, in line with the mass balance of entering		
Bonsucro or Bonsucro EU-RED compliant product (i.e. percentage of		
Bonsucro/Bonsucro EU-RED entering material + conversion factors). Examples		
of multiple products include, juice and bagasse following the crushing of		
sugarcane, sugar and molasses following the processing of sugarcane juice		
and ethanol and vinasse following the fermentation of molasses or cane juice.		
Indicator EU 6.10: Carry over volumes of Bonsucro EU-RED ChoC certified	No reference.	New requirement.
product as Bonsucro CHoC certified		
Volumes of Bonsucro EU-RED certified product can only be carried over to the		
next inventory period if the equivalent physical volume is in stock (refer to		
indicator EU 7.7). This requirement is absent in the Bonsucro ChoC Standard		
where volumes can be carried over even if there is no equivalent physical		
volume in stock (indicator 2.1.7. of the Bonsucro ChoC Standard). Therefore, if		
a Bonsucro EU-RED ChoC certified company ends an inventory period with		
available volumes in their account system but no more physical stock, that		
company cannot carry over their volumes as Bonsucro EU- RED ChoC certified		
but can carry over the volumes as Bonsucro ChoC certified. This ability to		
transfer volumes from Bonsucro EU-RED ChoC compliant to Bonsucro ChoC		
compliant provides flexibility and opportunities to Bonsucro EU-RED certified		
companies. The opposite is strictly forbidden, i.e. transferring Bonsucro Choc		
certified material to Bonsucro EU-RED ChoC certified if the equivalent amount		
is in stock.		
Bonsucro EU-RED ChoC certified volumes can only be traded in the physical		
market. Bonsucro ChoC certified volumes can either be traded as certified		
volumes in the physical market and/or as Bonsucro Credits via Credit Trading Platform.		
Indicator 7.1: Options for the greenhouse gas criterion for biofuels,	BS EU-RED ChoC Standard,	A number of default values and
bioliquids and biomass fuels (supply chain operators)	V5.1. Indicator 2.2.1-2.2.3	disaggregated default values have
		been changed. Default values and

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Supply chain operators shall use one of the following options for the		disaggregated default values for
greenhouse gas criterion for biofuels, bioliquids and biomass fuels:		biofuels and bioliquids can be found
a. Use of a default value for greenhouse gas emission saving if the		in Annex V of REDII, for biomass
production pathway is laid down in Part A or B of Annex V of REDII for		fuels in Annex VI of REDII.
biofuels and bioliquids and in Part A of Annex VI of REDII for biomass		
fuels. Default values can only be applied if the el value for those		Under REDII, there are two GHG
biofuels or bioliquids calculated in accordance with point 7 of Part C		calculation methodologies: one for
of Annex V of REDII and for those biomass fuels calculated in		biofuels and bioliquids, and one for
accordance with point 7 of Part B of Annex VI of REDII is equal or less		biomass fuels. The methodologies
than zero;		have been detailed in Part 3 and
b. Use of actual greenhouse gas values to calculate total greenhouse gas		Part 4 of Annex I of new Bonsucro
savings according to the REDII methodology and specified in Part C of		EU-RED Standard.
Annex V of REDII for biofuels and bioliquids and in Part B of Annex VI		
of REDII for biomass fuels;		Several aspects of the GHG
c. For biofuels and bioliquids, use of a value calculated as the sum of the		calculation methodology for
formulas referred to in point 1 of Part C of Annex V of REDII, where		biofuels and bioliquids has changed,
disaggregated default values in Part D or E of Annex V of REDII may be		in relation to calculation of emission
used for some factors and actual value, calculated in accordance with		factors and allocation of GHG
the methodology laid down in Part C of Annex V of REDII, are used for		emissions in the supply chain. Refer
all other factors;		to Part 3 of Annex I of the new
d. For biomass fuels, use of a value calculated as the sum of the		Bonsucro EU-RED Standard for
formulas referred to in point 1 of Part B of Annex VI of REDII, where		details.
disaggregated default values in Part C of Annex VI of REDII may be		
used for some factors, and actual values, calculated in accordance		The Biograce tool has not been
with the methodology laid down in Part B of Annex VI of REDII, are		updated and approved GHG
used for all other factors.		calculations under REDII, and can
		therefore no longer be used under
Detailed requirements and guidance on the use of default values and actual		Bonsucro EU-RED. Operators will
values have been elaborated in Annex 1 of this Standard.		have to develop their own tool
		based on the GHG methodologies in

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		Annex I of the new Bonsucro EU- RED Standard.