

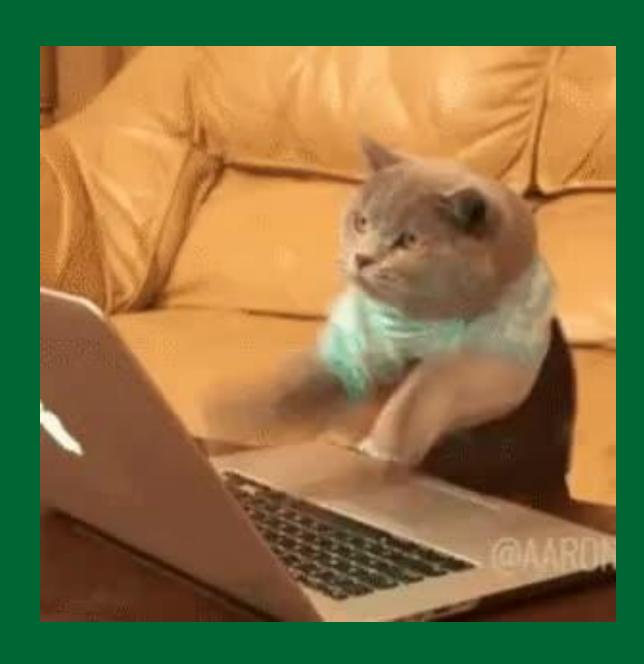
MEET TODAY'S SPEAKERS



Ilyana Cassam-Chenai Bioenergies Project Manager



Luis da Silva e Serra Secretary General



Before we go forward, we would like to hear from you: HOW FAMILIAR ARE YOU WITH THE IMPLEMENTATION REGULATION 2022/996?



European framework for Renewable Energies and Sustainable biomass

TARGET: Moving from fossil fuels to cleaner energy!



- EU Renewable Energy Directive 2018/2001 (RED II): Renewable energy sources consumption of 32% by 2030 and a possible 42.5% target for RED III
- Implementation regulation 2022/996 (IR): set of rules to verify sustainability and greenhouse gas emissions saving criteria and low indirect land-use change-risk criteria



OUR GOAL TODAY

The Commission implementing regulations 2022-996

Last year, the European Commission published the <u>Commission Implementing</u>
<u>Regulation 2022-996</u>. This document introduced new technical references to the
RED II, directly impacting the sustainability certification process throughout the fuel market.

2BS updated its guidelines according to the new references

2BS submitted updated documentation to the European Commission to comply with the new references. This documentation is currently under review by the European Commission, and its final version is not yet validated.

Implementation deadlines

The Implementing Regulation requires the implementation of the new documents from January 1st, 2024. Therefore, to help you get ready for the changes to our guidelines, you can already find the documents as submitted to the European Commission on the <u>2BS website</u>. We have also prepared a document where you may find a brief explanation of the changing points per stakeholder, and we are hosting this webinar to go even further on explanations.

Please bear in mind that minor modifications are expected to 2BS updated Standards and Procedures. As soon as we have the final documents, the present material will be updated.



SUSTAINABILITY CERTIFICATION

2BS is a non-profit organization,

created in 2011, when leading experts from the agricultural and fuel industries teamed up to develop a sustainability certification to value virtuous agricultural practices.



Our guidelines cover the entire chain

from the first collection points to traders and transformation units. We support customers in demonstrating compliance with RED II, giving them access to the biofuels market!



Our guidelines meet the Renewable Energy Directive (RED II),

and our certification is recognized by the European Commission under the RED II. We work with representatives from the industry to develop and validate our guidelines.



2BS IN NUMBERS

we operate in

20+

countries

10+

years of experience in sustainability certification

700+

certifications in Europe and Latin America

30K+

farmers concerned via the certified First Gathering Points 580+

customers

certification Bodies referenced and trained



VOLUNTARY SCHEME



Certification

2BS has developed the 2BSvs certification, based on the RED II Directive.

This certification is applicable to all organizations in the production and distribution chain of biofuels, bioliquids and biogas, worldwide, who want to sell their products in the European Union



Our certificate

2BS works with referenced certification bodies trained by our team to carry out accreditation audits.

The 2BSvs certificate is valid for 5 years, provided that annual audits are organized.

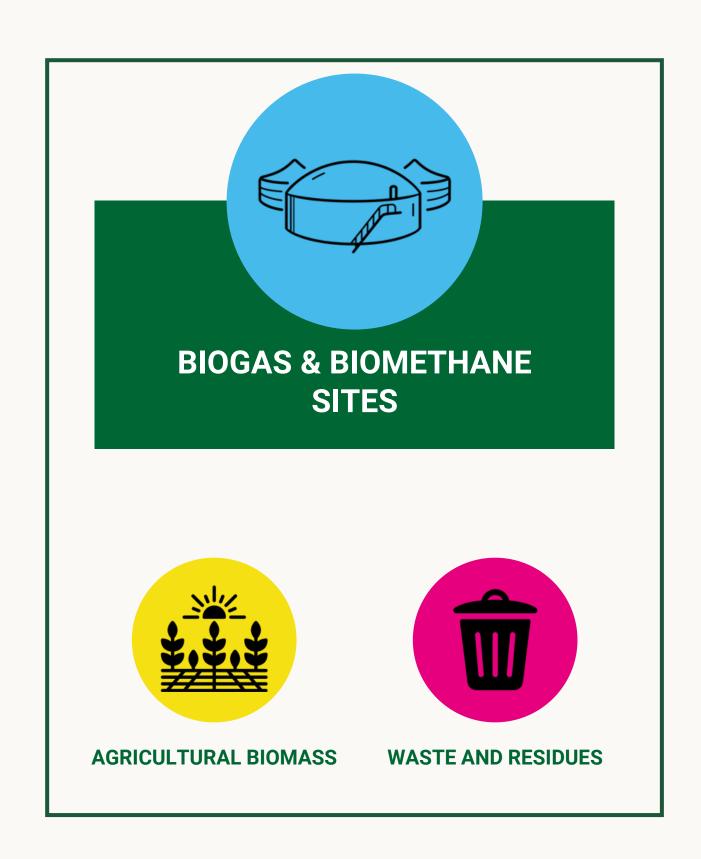


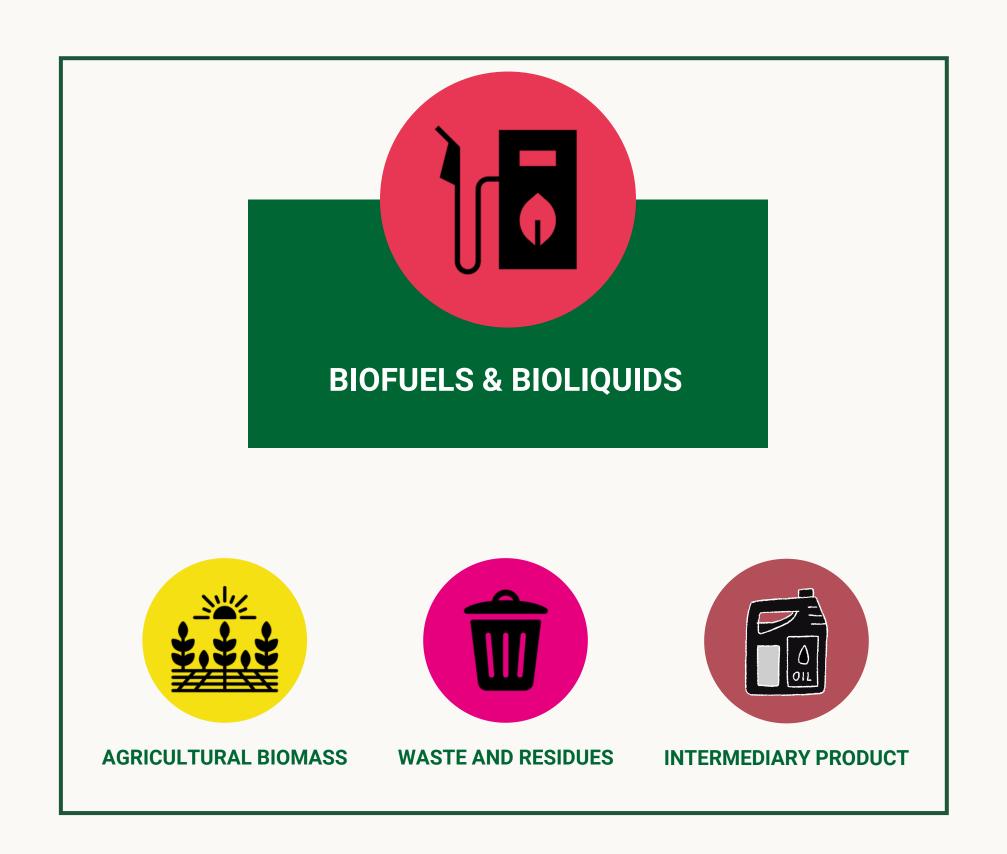
Recognition

Our sustainability certification is recognized by the European Commission, enabling products to be marketed under the "sustainable" label.

The 2BS certificate is equivalent to and enforceable against all Voluntary Schemes recognized by the European Commission.

SCOPES OF CERTIFICATION







THE

BIOFUEL & BIOLIQUID

CHAIN



THE

BIOFUEL & BIOLIQUID

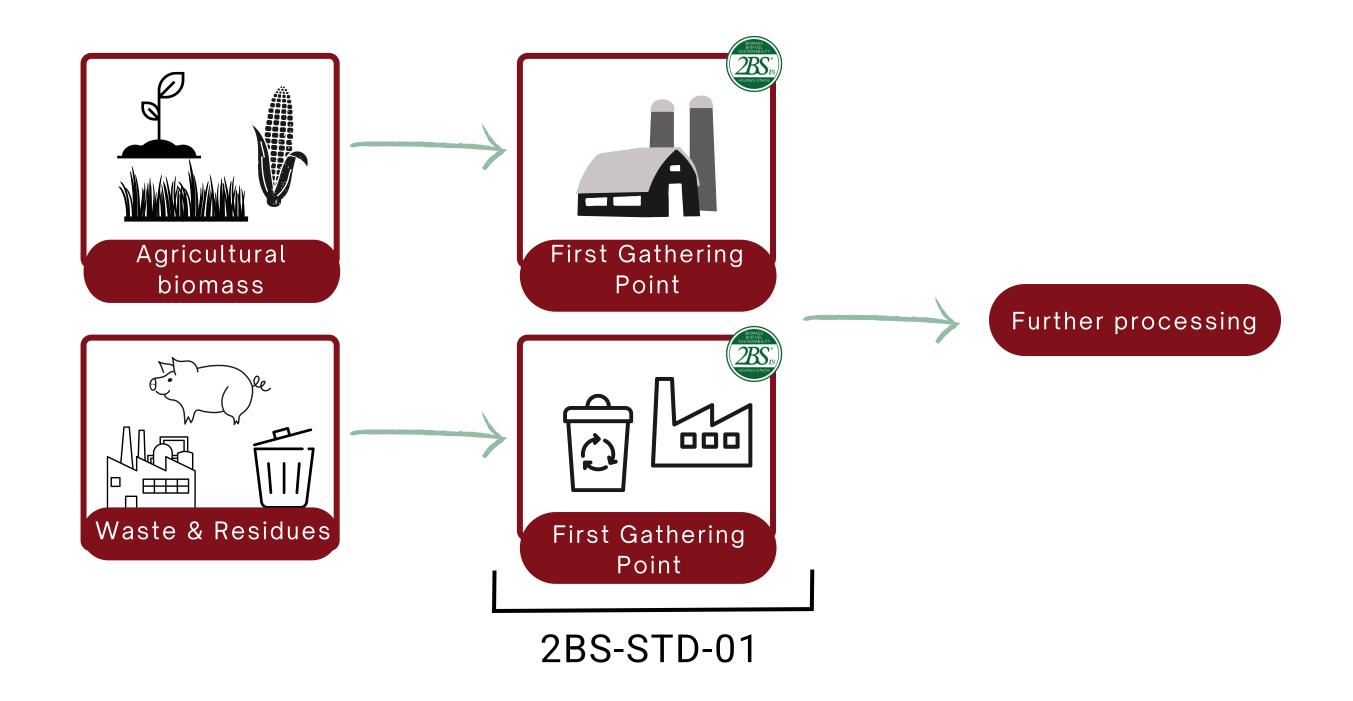
CHAIN

FIRST GATHERING POINTS



WHAT ARE FIRST GATHERING POINTS? Definition

Customer (Economic Operator, in the Directive language) that collects agricultural biomass (from farmers) or waste & residues (from point of origin) and dispatch them for further processing into biofuels, biogas and bioliquids.



INTERNAL AUDITS

Annual monitoring activities (reminder)

The 1st gathering entity shall ensure the required sustainable characteristics and GHG information provided by all the farmers is **accurate**, **reliable**, **and trustworthy** before recording it in the mass balance.

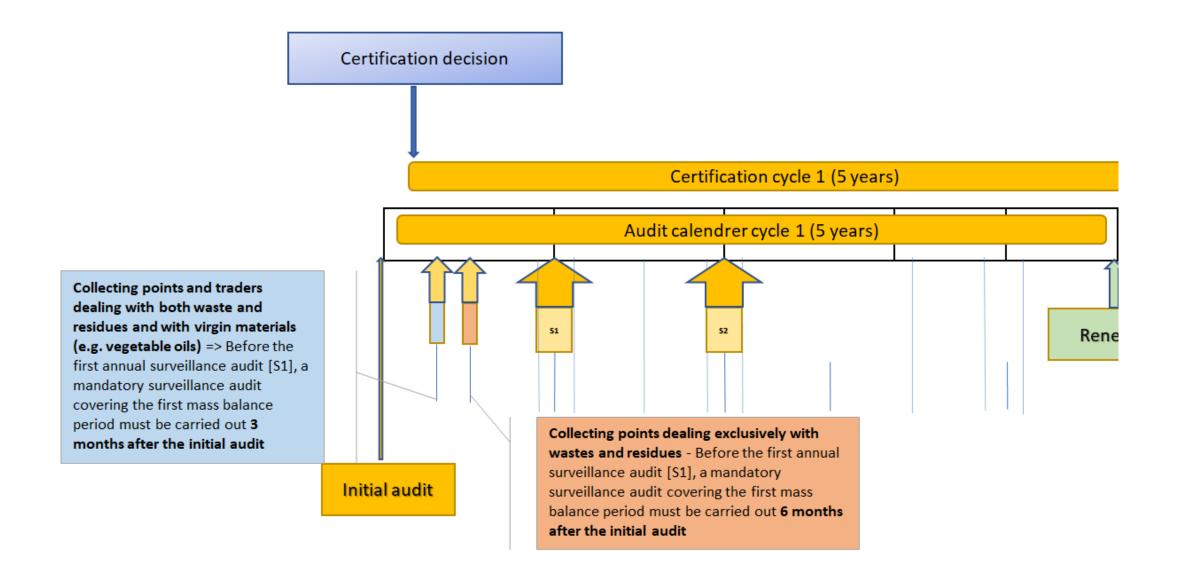


Every self-declaration is crosschecked **on-site annually** for **every farmer** claiming sustainability for its crops. The results of these crosschecks shall be recorded by the FGP and made available to third-party audits.

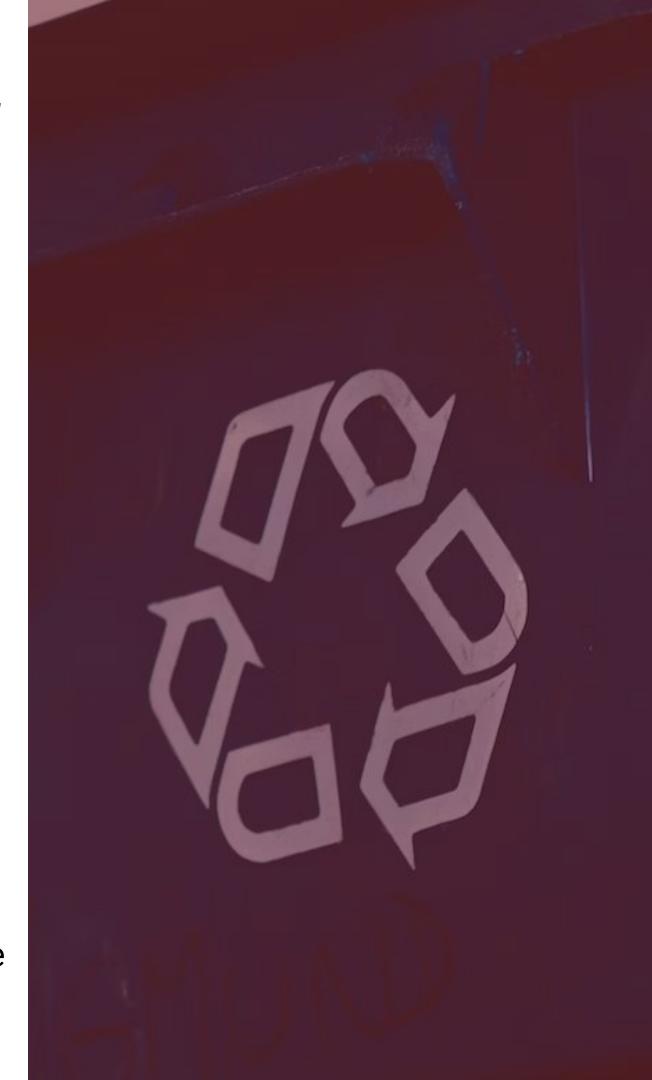
WASTE & RESIDUES

Additional audits for First Gathering Points collecting feedstock for the biofuel & bioliquids sector (concerning new customers)

Goal: better control of waste & residues sources



For sites that each month receive **five tonnes** or more of waste and residues as listed in Annex IX - Part A of RED II from one or more suppliers: the square root of the total number of suppliers in this category shall have an **on-site** audit.



SOIL SUSTAINABILITY

Addition of a principle concerning the impact of <u>collecting agricultural</u> <u>residues</u> (straw)

Goal: better management of the soil quality and carbon sequestration

To re-balance CO2 storage, a management plan for soils shall be put in place, determining the initial status of the soil and the monitoring of agricultural techniques to improve the CO2 balance in the soil.

There is a national law

- Management plan required by the law
- Evidences enabling validation by national authorities
- Self declaration

There is no national law

- Management plan taking into account: soil quality, soil contamination, and soil erosion
- Evidences enabling validation by a competent individual, a professional agronomy advisor/ consultant, or a research institution's advice
- Self declaration





GHG EMISSIONS - EEC FACTOR

UPDATES TO THE CRITERIA FOR THE CALCULATION OF GHG EMISSIONS WHEN USING ACTUAL VALUES

Goal: align with the latest changes to the 2006 IPCC guidelines

Eec, one of the factors used in the emissions calculation formula, represents **Emissions from the Extraction or Cultivation of raw materials**.

$$E = e_{ec} + e_{l} + e_{p} + e_{td} + e_{u} - e_{sca} - e_{ccs} - e_{ccr}$$

The amount of fuel used for field preparation, seeding, fertilizer and pesticide application, harvesting and collection of raw materials, and their transportation to storage

The emissions from drying the seeds before storage as well as from handling and storage of biomass feedstock;

Upstream emissions such as the production and transport of chemical fertilizers and pesticides up to the farm;

The emissions from fertilizer acidification and liming application for nitrogen fertilizers or for reactions of agricultural lime in soil;

Soil (nitrous oxide/N20) emissions from cultivation (Tier 2 of the IPCC methodology) with specific emission factors for different environmental conditions, soil conditions, and different crops).

We are preparing dedicated training on this subject. In the meantime, you may consult the updated calculator available on our website.

GHG EMISSIONS - ESCA FACTOR

UPDATE OF THE ESCA METHODOLOGICAL APPROACH
Goal: to align esca methodology with the latest protocol of the EU

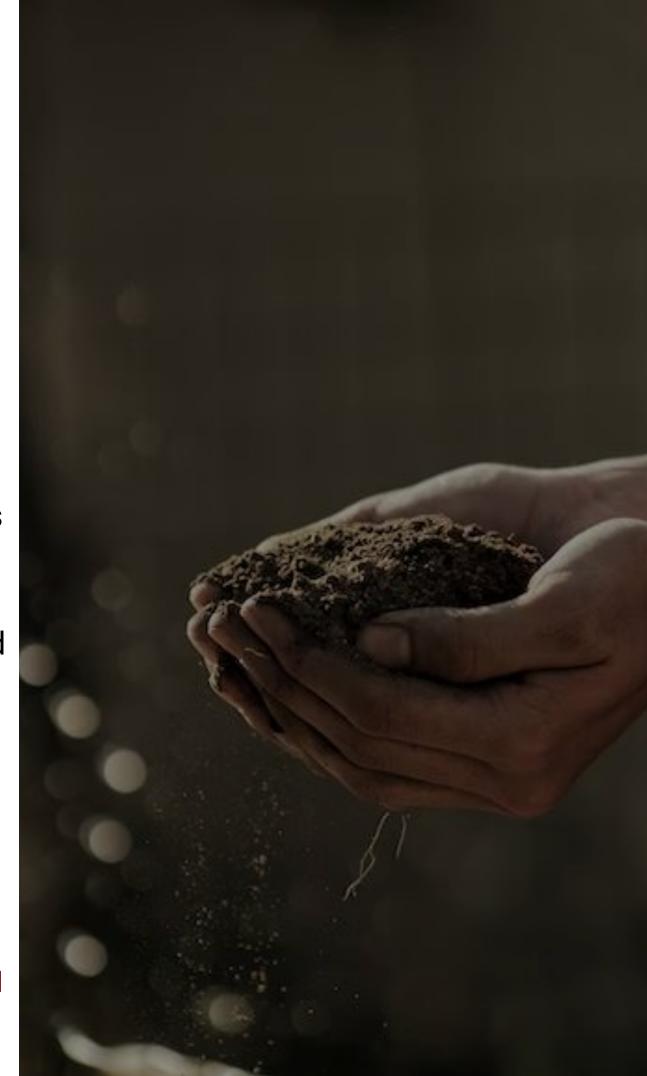
Esca, one of the factors used in the formula for emissions calculations, represents Emission savings from **Soil Carbon Accumulation through improved agricultural management.**

$$E = e_{ec} + e_l + e_p + e_{td} + e_u - (e_{sca} - e_{ccs} - e_{ccr})$$

The esca methodology has evolved. This new method combines analyses of soil and modeling - a calculator to quantify the amount of CO2 stored in the soil. It is initially based on estimations from the IPCC 2019 model. These estimations will be validated at regular intervals (every 5 years) by actual field measurements of carbon stocks. These actual field measurements of carbon stocks are confirmed by analysis of soil samples.

The method includes several scenarios that define the audit evidence to be produced by economic operators. It provides different options for a farmer who joins the approach. It also specifies ways of leaving the methodology and the associated penalties.

We are preparing dedicated guidelines on our updated esca methodology that will be shared with you shortly. In the meantime, you may consult the updated official document on our website (2BS-PRO-03).



GHG EMISSIONS - BIOLIQUID CHAIN

REMINDER OF ADDITIONNAL CALCULATION

For energy installations delivering only heat

$$EC_h = \frac{E}{\eta_h}$$

For the electricity coming from energy installations delivering useful heat together with electricity and/or mechanical energy

$$EC_{el} = \frac{E}{\eta_{el}} \left(\frac{C_{el} \cdot \eta_{el}}{C_{el} \cdot \eta_{el} + C_h \cdot \eta_h} \right)$$

For energy installations delivering only electricity

$$EC_{el} = \frac{E}{\eta_{el}}$$

For the useful heat coming from energy installations delivering heat together with electricity and/or mechanical energy:

$$EC_h = \frac{E}{\eta_h} \left(\frac{C_h \cdot \eta_h}{C_{el} \cdot \eta_{el} + C_h \cdot \eta_h} \right)$$

		Transport 94 grCO2/MJ		Electricity 183 grCO2/MJ	Heating / Cooling 80 grCO2/MJ					
RED II, Annex V , C. Methodology	Biofuels	×			×					
	Bioliquids			×	×					
RED II, Annex VI, B. Methodology	Biomass Fuels	×		×	×					
Biofuels are liquid fuels used for transport which are produced from biomass Bioliquids are liquid fuels produced from biomass which are used for purposes other than transport, such as electricity and generation and heating and cooling Biomass fuels are gaseous and solid fuels produced from biomass										

ANY QUESTIONS?

Please, submit your questions via the Q&A button!





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BIOFUEL & BIOLIQUID

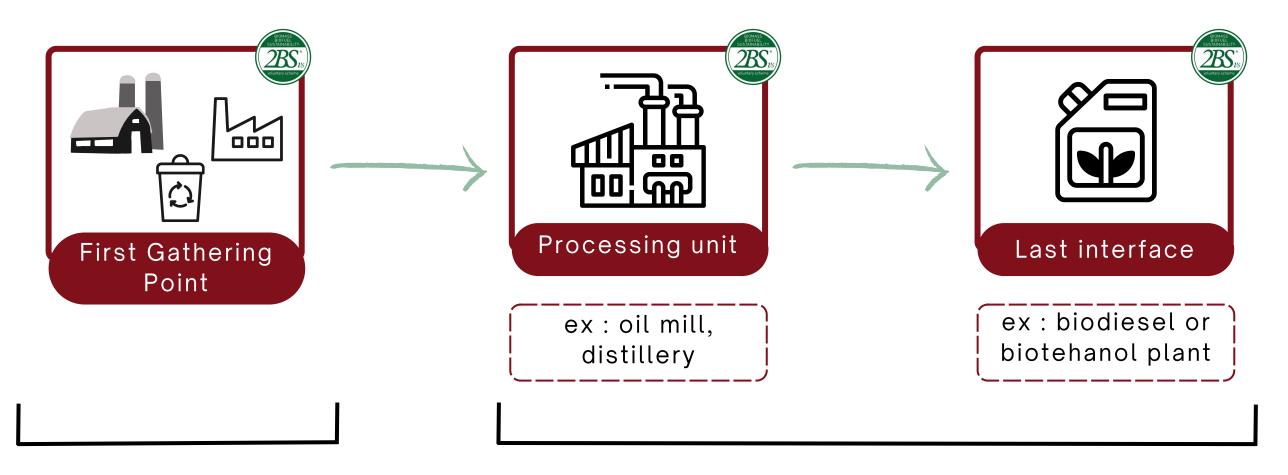
CHAIN

PROCESSING UNITS & LAST INTERFACES

WHAT ARE PROCESSING UNITS & LAST INTERFACES?

Definition

This is the customer (Economic Operator, in the Directive language) that transforms agricultural biomass or waste & residues into biofuels or related products.



2BS-STD-01

2BS-STD-02



ACTUAL GHG EMISSIONS

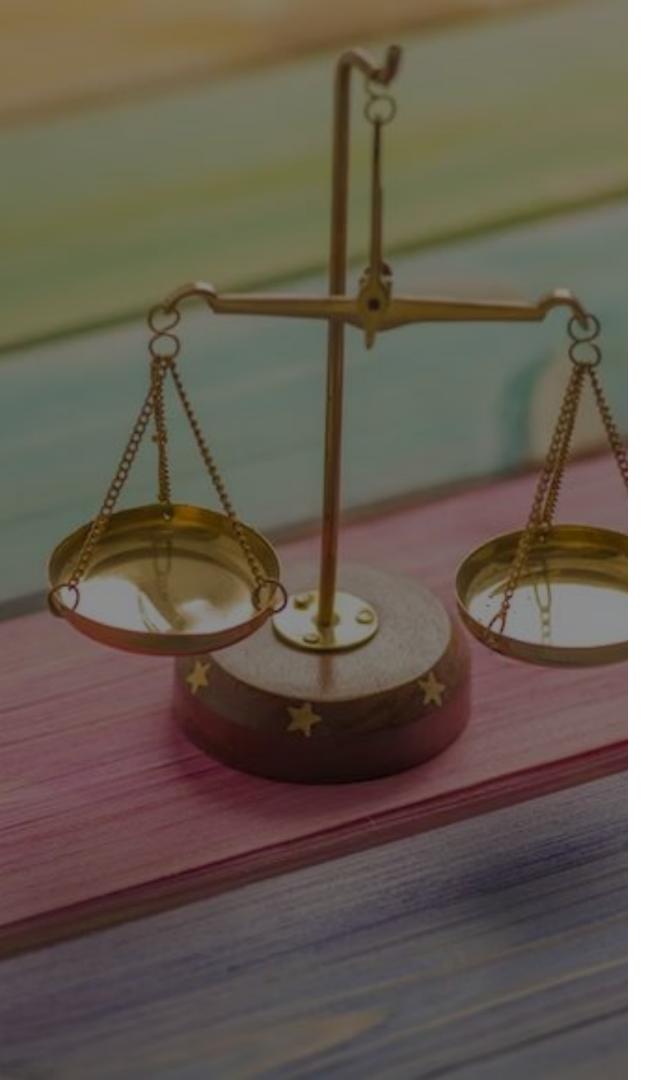
JUSTIFICATION OF THE GHG EMISSIONS CALCULATION WHEN THERE IS 10% OR MORE DIFFERENCE BETWEEN TYPICAL VALUES AND ACTUAL VALUES

Goal: strict control of the calculation of GHG emissions when using actual values

During an audit, a **Last Interface** shall justify the percentage of GHG reduction whenever it is **10% or more** from the typical value for the applicable biofuel production pathway (Annex V).



The audit report shall contain the reasons justifying the gap.



MASS BALANCE

AGGREGATING RAW MATERIALS

Goal: to simplify the justification of mass balance

When preparing mass balance reports, Processing Units and Last Interfaces now have the possibility to aggregate raw materials in the **same product group**, when:

- there are different types of non-food cellulosic materials with similar physical and chemical characteristics,
- the raw material has a corresponding Lower Heating Value (LHV) and/or conversion factors, or
- they correspond to the types of lignocellulosic materials in Annex IX (advanced biofuels), Part A, point q, of the Directive (EU) 2018/2001.



THE

BIOFUEL & BIOLIQUID

CHAIN

ALL OPERATORS

CHECKLIST

Goal: to simplify the implementation of 2BS Standards

The checklists have been updated to facilitate your understanding. Each indicator has been summarized by **key words**. You can also filter indicators by type of raw material (for STD-01) or by sector (for STD-02).

These checklists have also been communicated to auditors so that you have the same basis of understanding. You can find them on 2BS website.

2BS - Mandatory Checklist for the audit of First gathering point (agricultural biomass and wastes and residues) Please refer to 2BS-STD-01/cor more details									version 0.3 29/08/2023								
Requirement						Findings		Conformity									
Reference		Requirement		Criticality level		Verifier to control	Scope		Reference documents				I if nonconformity state clearly the evidence, the requirement and the failure		\top		
							Agricultural biomass	Wastes and residues	PRO-03 (GHG emissions)	PRO-04 (waste & residues)	PF (bi ▼	Instruction to complete the verifier	l if conform, identify the evidence (records)	No	Yes	N.A	
Requiremen	nts for int	ernal management and monitoring system															
		Evidences (data/records) for biomass (raw materials) suppliers to demonstrate compliance with RED II and sustainability.		Т	П	List of official data, documents, land registry and/or records, or	8		8					Т	\top	\top	
	STD-01				ŀ	List of crops and cultivated areas	8										
	0.1.1				*	List of points of origin		×									
					ı	List of official documents currently in use	×	8		×							
		List of all its biomass suppliers claiming sustainability with the approximate localization of the production area and points of origin.				List of suppliers with - for each supplier - the name, address, and main characteristics (location, type of feedstock cultivated, area of certification, type of material, estimated amount of sustainable material that can be harvested annually,	х				×						
	STD-01 0.1.2			×		List of suppliers with - for each supplier - the geographical location of the production area with, for example, the geographical coordinate as a reference	×				×	These lists shall be reviewed and updated at least once a year or when a new supplier is added.					
						List of points of origin with - for each - the geographical location, associated processes and estimated material that could be collected annually per point of origin		×		×	×				\perp		
biomass						Self-declarations fulfilled, dated, and signed	×	×		×	8						
0.1 STD	STD-01	Annual signed document (ex self-declaration) from biomass suppliers, confirming their commitment to producing sustainable biomass in accordance with EU Directives.			" [Contract with appropriate sustainablity clause	×	×		×	×						
	0.1.3				<u>"</u> [Amendment to an existing contract	8	×		×	×						
						Other questionnaire or form used during site visits by first gathering point	×	×		×	×				\perp	\perp	
		Origin and country of origin of the biomass through the suppliers' declarations.				Location of the suppliers of biomass, country of origin, NUTS 2 region, or	×				×						
					Ī	Land registry document, or	×				×						
	STD-01 0.1.4				×	GPS chart, or	×	×		×	8						
	0.1.4	•				Access to the Reference Map of Agricultural Plots.	×				8						
						Access to the contracts, addresses, contacts of each point of origin, including the date and transport records from the point of origin up to the collection point		×		×	×						

SAI/FSA 3.0 EQUIVALENCE

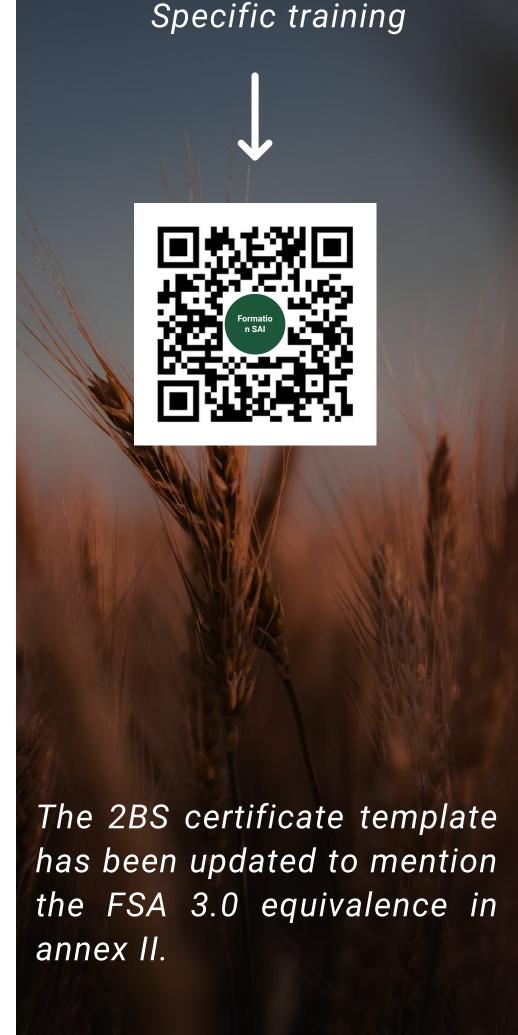
2BS STANDARDS ARE NOW POSITIVELY BENCHMARKED AGAINST FSA 3.0

With great pleasure, we announce that the **2BS certifications** 2BSvs and 2BSXtra were positively benchmarked by SAI against the FSA 3.0.

The Sustainable Agriculture Initiative (SAI) serves as a tool in the food industry to evaluate and enhance the sustainability of farming practices. They have created the Farm Sustainability Assessment (FSA) to compare existing codes and schemes with SAI's criteria for sustainability.

After a recent evaluation carried out by the SAI Platform, 2BSvs and 2BS Xtra are on par with the French standards set by the FSA Silver level. This means that French-based companies using certified 2BS products can market their products 2BS-certified products as being "certified under 2BS-FSA Silver-equivalent certificate."

Moreover, 2BS has introduced an optional enhancement known as the "SAI Silver" add-on for other European countries, which can be implemented at the First Gathering Point level. This add-on allows companies in Europe under 2BS certification systems to value their products as being "certified under 2BS-FSA Silver-equivalent certificate."



UNION DATABASE (UDB)

Deployment of the Database

- WHICH FUELS MUST BE REGISTERED IN THE DATABASE?
 Biofuels, bioliquids and biogas for transport use.
- WHICH OPERATORS MUST BE REGISTERED IN THE DATABASE?

 SVs must register all EOs in the biofuels/bioliquids supply chain.
- WHAT INFORMATION IS REQUIRED?
 Information on tonnage transacted with sustainability characteristics including GHG emissions.
- WHAT ABOUT CONNECTION TO NATIONAL DATABASES?
 Nabisy and Carbure are in the process of connecting to the UDB.
 The aim will be to enter information only once.
- WHEN WILL IT BE OPERATIONAL?
 The database will be deployed on 01/01/2024.

European Union Database UDB For economic Ensures operators working transparency and with the European traceability of market renewable fuels

Link to our web page with full explanations : https://www.2bsvs.org/union-database.html

Link to the wiki provided by the European Commission: https://wikis.ec.europa.eu/display/UDBBIS/Union+Database+for+Biofuels+-+Public+wiki



Next steps

You can access all official 2BS documents, on our website: <u>click here</u>.

Please bear in mind that minor modifications are expected as 2BS updates its Standards and Procedures, as they are still in the approval process with the European Commission. As soon as we have the final documents, our website will be updated.

OUR TRAINING OFFERS coming soon

Coming soon for auditors and customers:

Training on Greenhouse Gas emissions Actual values & others!

Training on SAI guidelines:

A dedicated training is open for economic operators and auditors. The goal is to learn:

- for economic operators: which additional elements have to be implemented to claim FSA 3.0 equivalence.
- for auditors: how to audit EO using the FSA 3.0 claim.

If you are willing to attend this training, please register using the QR code below



All training sessions can be organized in English and in French.

Each session is adapted to the participants' time zone.

ANY QUESTIONS?

Please, submit your questions via the Q&A button!







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