

SFAP-Verified CO₂- statement

CO₂ footprint related to crop input, soy processing and transport

CO₂ footprint related to No Land Use Change during the last 20years.

Version 7.1 Applicable as per 1/1/2022



1. Introduction

The Sustainable Farming Assurance Programme (SFAP) is an international programme for the verification of sustainable practices in agricultural production at the level of the farm. The programme is globally applicable and is relevant for all arable crops that are used into feed solutions (e.g. soy, maize, barley, wheat).



2. CO₂-Crop Data Verification

Food and feed companies are more and more aware of, and held accountable for, their contribution to climate change. They are challenged to take adequate action to calculate their CO_2 -footprint and take actions to lower their climate impact. They can do that via compensation measures (offsetting) or by lowering emissions in their value chains (in-setting). The movement into communicating the CO_2 - footprint and making fact-based CO_2 -calculations is developing quickly.

The feed industry has initiated the Global Feed LCA Institute (GFLI) to promote and align efforts to make the CO₂-footprint of feed ingredients and feed products visible. GFLI builds upon the LEAP methodology. GFLI makes use of the AgriFootPrint database created by Blonk Consultants and other experts. Although the LCA methodology proposed by LEAP and the set-up of the FeedPrint database is solid and science based, the method itself is only as strong as the data introduced to the model.

SFAP is working with farmer groups to make their specific CO_2 -footprint visible in a trustworthy and verified manner.

Our approach

The CO_2 crop footprinting calculation used by SFAP is aligned with the rules of the GFLI methodology, which are based on the FAO-LEAP approach. By including SFAP's local experts and extension workers, an independent certification body (CB) and an independent expert in LCA-methodology, SFAP is able to create a very accurate picture of the CO_2 -footprint of a farmer(group)(s).

Blonk Consultants has processed the producer group data into SFAP CO_2 Footprint specific data within the Agrifootprint Database .

Since early 2023 our soybean production data are accepted by GFLI as branded data.

The crop data is specific for the soybean production by SFAP Producer Group(s) based in the Cerrado. The data will be updated every 4 years, unless there are reasons to do so sooner. SFAP's local experts will keep track of changes in production practices that might result in a lower or higher footprint.

For more detailed information see Annex 1

Climate friendly agriculture

Farmers certified under the SFAP standard apply good agricultural practices to reduce their greenhouse gas emissions, for instance by lowering fossil fuel use and by applying as little as possible agrochemicals and fertilizer. In addition, measures are taken to improve soil health. A healthy soil is a soil that captures more carbon. In the future, SFAP considers focusing even more on carbon sequestration in the soil.



<u>3 Certfication of 20 year Non Land Use Change</u> As per "SFAP Verified CO2 Statement version 7.1" For the Dutch Market only

SFAP Verified CO2 Statement (also referred to as SBLC: Satelite Based Land Use Change Certificate)

International rules are still developing on how to connect a CO2 statement to a physical flow. For the Dutch market, SFAP developed specific rules on how to do this.for the years 2021- 2023. Rules for 2024 still have to be defined.

A SFAP verified CO2 Statement is considered to be an independent certificate which can be transferred on a B/Cl method(or Area Mass Balance) to an user who wants to claim a Non LUC CO2 contribution for the product in scope.

Analysis on the 20 year Non Conversion can only be done on area of farm(s)groups that are Fefac Soy Sourcing Guidelines compliant.

Data collection

Official land change satellite images (as per specifications in the FEFAC Soy Sourcing Guidelines 2021) are analyzed to compare the situation of 20 years ago with the present situation.

Using the Satellite maps, the certification body will identify the area's which have been converted 20 years or longer ago. The 20 years limit is introduced by the FAO-LEAP method. If conversion took place more than 20 years ago, the negative impact on the environment (Land Use Change Contribution) is not included into CO_2 - Footprint calculation.

For more details see annex 2

Creation of SFAP verified CO₂-statement /SBLC

A SFAP verified CO2 statement/SBLC is an independent certificate. It always is originating from area of (a) farmer group(s) that is/are Fefac Soy Sourcing Guidelines compliant.

A subset of the full area owned by the identified farmer groups qualifies for an extra low CO_2 -footprint. For areas that have been converted at least 20 years ago, no Land Use Change Contribution is counted in line with the FAO-LEAP LCA-methodology.

The SFAP Verified CO_2 Statement/SBLC will be issued for those area's and volumes of agri product in scope related to the area/volumes which qualifies for a Non-LUC contribution on CO_2 .



Scope of a SFAP verified CO₂ Statement /SBLC in the context of the Dutch market.

The scope of a SFAP verified CO₂ statement/SBLC will be the produced volume on an area without conversion during the last 20 years.

Roles and responsibilities

The following roles and responsibilities are defined in the process of arriving at a SFAP verified CO₂ statement.

A- Related to CO₂ footprint crop production data.

Group Manager

- The Group Manager will distribute the survey on crop input data- as identified by Blonk consultants (as LCA Expert) and help the producers to fill in the survey.
- Group manager will collect the surveys on crop input data and checks the quality of data obtained from the producers.
- Group Manager send the collected data to the SFAP secretariat.

LCA expert

The LCA-expert Blonk Consultants will:

- Process the data obtained from the SFAP-secretariat (both production data and satellite images).
- Make the CO₂-calculations for the specific SFAP producer group(s).
- Add the data for the specific SFAP producer group(s) to the AgriFootprint and GFLI database as SFAP Branded soy data.

SFAP Secretariat (ProAgros)



- Initiate the crop input data collection at the level of the Group Manager.
- Send the specified crop input data collected by the Group Manager to the LCA-expert.
- Communicate with the CB the results of the LCA calculation of the LCA Expert/Blonk Consultants. These Branded LCA Data will be part of the Verified CO₂.Statement issued by the CB.
- Follow developments in GFLI.

B- Related to Land use Change

SFAP Verified CO2 Statement/SBLC

Group Manager

- The Group Manager identifies which farms within the Producer Group(s) will be analyzed for a 20 year Non-Conversion, based on Satellite image comparison.
- Will calculate the average yield of the crop in scope for the Producer Group(s)

Inspection body

The Inspection Body will based on the rule of SFAP Verified CO2-Stement version 7.1

- Gather the Satellite maps for the identified farms in the producer group (s) for the current year and (at least) 20 years ago. Satellite Maps will have a resolution of 30 meters (or better)
- Evaluate the Satellite maps and determine the acreage already converted 20 years ago.
- Interpret the Satellite Images using recognized methodologies.
- Store the Satellite maps and make them upon request available to the SFAP-secretariat.
- Issue a SFAP Verified CO₂-Statement/SBLC of the total acreage/volumes produced of the agri commodity in scope of the producer group(s) for the area with a 20 year Non Conversion. The area without LUC will be primarily allocated to the agri commodity in scope.

Volume will be calculated basis average yearly yield of the producergroup(s) of the commodity in scope (basis input from the Group manager).

• A SFAP Verified CO₂ -Statement/SBLC will be issued per crop year.

Management of the SFAP verified CO₂ statement

For the Netherlands only:

The Verified CO₂-statement/SBLC is an additional certificate that SFAP offers.

The Verified CO2 Statement/SBLC is an independent Certificate that can be transferred separate independently from a Fefac Soy Sourcing Guidellines compliant certificate

Transfer will either be Book&Claim or Area Mass Balance based.



Users of such Verified CO_2 -statements obtain the right to use the LCA-information for a volume corresponding to the volume mentioned on the Verified CO_2 -statement Transfer Document*)

The Certification Body

or

A Certified Accountant

on a calendar yearly basis will keep track of

- Total volume of SFAP CO₂-statements/SBLC issued
- Volumes transferred to SFAP scheme owner
- Volumes transferred by SFAP scheme owner to the end-user(s) of these SFAP CO₂ Statements /SBLC
- Issue a Verified CO₂ -Statement Transfer document from the scheme owner to it's end users on a yearly basis/per end user specific.
- Yearly Starting- and End Balance of CO₂ statements in stock by the SFAP scheme owner.

Validity of a SFAP Verified CO₂ Statement/SBLC

Scheme owner level

Year of harvest of the product in scope+3

Final buyer level

Year of acquiring the Verified CO₂ statement from the Scheme owner+1 (based on the data originating from the Verified CO₂ Statement Transfer Document).

Ownership

The SFAP-programme is owned by ProAgros.

ProAgros is a company that works for several large and small players in the agricultural commodity production chain. ProAgros offers supply chain solutions that are also well accepted by farmers to the market. ProAgros developed *Sustainable Farming Assurance Programme Non Conversion*® in close cooperation with local experts that have a vast experience in working with and managing farm groups. These experts add local frmer knowledge to the programme.

The aim of the programme is to help farmers prove in a credible and cost-efficient manner that they are producing in line with legal requirements and internationally accepted standards for responsible production. And thereby also creating market access to companies / countries that have certain additional sustainability requests and demand solid verification of the sustainability requests.

ProAgros is:

- Owner of the programme
- First contact organization for the programme
- Market facilitator: finding groups of farmers who want to certify and connecting them with supply chain partners who want to buy certified material (Book & Claim incl. Regional Credits)
- Issuing licences to partners who will certify farmers against the programme



• Responsible for the quality of the programme (e.g. by training auditors to execute the programme correctly etc.)

Annex 1

Addition of data to AgriFoot print and GFLI database

The farmer group specific CO₂-data ('branded data') is added to the Agri-Footprint database, managed by Blonk Consultants. In this database there is data for SFAP Soybeans Cerrado production, SFAP soybean meal crushed in Brazil and SFAP soybean meal crushed in North West Europe both included transport up to the feed mill in NW Europe. Table 1 provides an overview of the CO₂-reduction possible when using SFAP branded data. As of 2023, these data are also accepted as branded data by GFLI and are available upon request.

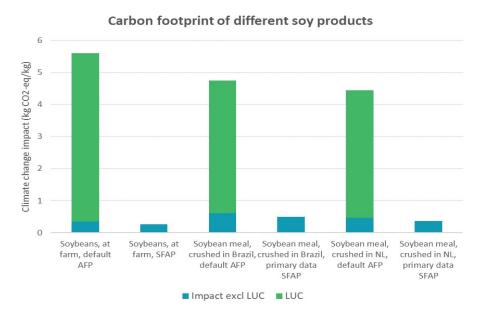


Table 1: Climate change impact (kg CO₂ eq/kg) of various soy products and origins (source: AgriFootprint)

Ideally feed companies make use of carbon footprint data that is recognized by the Global Feed LCA Institute (GFLI) as being credible data. Currently the data in the GFLI database is mostly generic in nature and default values for different production countries are included. GFLI is in the process of identifying the rules for adding and accepting branded data to their database. SFAP follows the developments in GFLI closely in order to add the SFAP data to the GFLI database as well, as soon this is possible. Note that as long as SFAP-farmer group data is not specified in the GFLI FeedPrint database, users of the verified CO2statement can use the generic default values without-LUC.



Impact excl LUC	LUC	Total
0.352	5.251	5.603
0.267		0.267
0.615	4.136	4.751
0.494		0.494
0.464	3.985	4.449
0.363		0.363
	LUC 0.352 0.267 0.615 0.494 0.464	LUC LUC 0.352 5.251 0.267 0.615 4.136 0.494 0.464 3.985

Table 2: Soybeans and soybean meal with and without land use change (Source: Agri Footprint)

Data renewal process

Data on land use change will be updated on a yearly basis. Due to the rolling deadline of 20 years, it can be that for certain lands the exclusion of the Land Use Change Contribution becomes applicable. The land use change data will also be updated if the producer group changes of composition. In the situation that new farms are being included in the producer group(s), new Satellite maps may be collected, assessed and verified.

Farms that have left the group might also impact the area of 20 years of no land use change within the group.(s). The area calculation will be changed according to this new data every crop year.

Annex 2

Satellite image check on 20 years Non Conversion







Disclaimer

- The SFAP program is exclusively to be used by ProAgros and its SFAP license holders; like farm group managers- and certification companies.
- Certificates to be issued exclusively by ProAgros after verification of the farm (group) by a SFAP licensed Certification Body.
- Certification registration will be done exclusively by or on behalf of ProAgros.