

March 2024

THE GLOBAL FEED LCA INSTITUTE

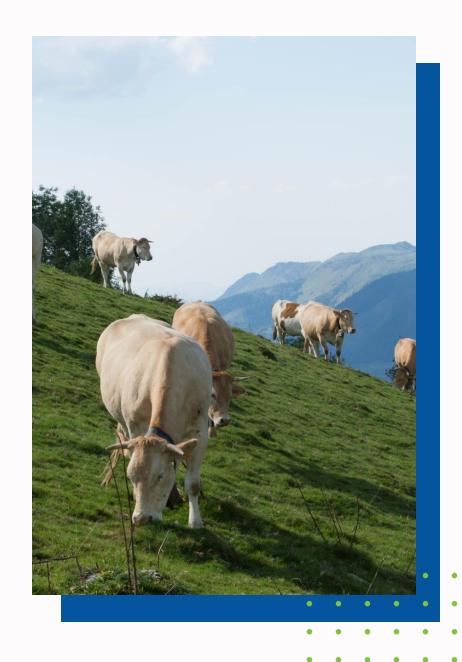
supporting the global metrics for sustainable feed

www.globalfeedlca.org



Content

01 Introduction
02 Alignment
03 Branded data
04 Institute & membership



Introduction

What is GFLI and its database?

What is GFLI

Independent non-profit Institute with the purpose of;

- Providing a globally accessible, evolving animal feed ingredient Life Cycle Analysis (LCA) database;
- Supporting compliant, credible, and transparent environmental assessment of animal feed ingredients and their role in the environmental footprint of animal derived products; and
- Fostering continuous improvement of the environmental performance of animal derived products.

GFLI database

The database allows feed, livestock and aquaculture sectors to:

- use data based on a harmonized methodology;
- calculate the environmental footprint of products in a transparent and trustworthy manner; and
- benchmark and make meaningful comparisons.

Makes it possible to produce feed with a lower footprint; resulting also in food products with a lower footprint/kg (meat/dairy/eggs).

GFLI timeline

while the Institute is established in 2019, a long road came before...



2020 onwards Publication of the database, member-based institute,



ALIGNMENT

GFLIAND GLOBAL DEVELOPMENTS



Alignment

GFLI looks towards being aligned with major developments, allowing database users to comply with (inter)national regulations and initiatives to simplify reporting duties



Database use

Having the GFLI database as underlying database for initiatives for high quality secondary datasets for scope 3 emissions



Partnership

Through collaboration with initiatives, the GFLI positions itself as the feed LCA database; simplifying supply chain communication and solving the datagap of the animal sourced food industry

EU Developments in the market

EC Tender - EF Database

The European Commission has a publicly available database with the major ingredients of the largest contributors to emissions.

- Current tender for version 4.0: discussions ongoing re: how to structure the next framework, which may impact how the GFLI can support PEF studies
- Concerns a multitude of datasets, of which 750 food/feed ingredients

Corporate sustainability reporting (CSRD)

This directive modernises and strengthens the rules concerning the social and environmental information that companies have to report.

- Active since January 2023
- Required for all large companies and all listed companies to disclose information on what they see as the risks and opportunities arising from social and environmental issues, and on the impact of their activities on people and the environment.
- Concerns a broader aspect of sustainability than just LCA, such as: social issues and treatment of employees, respect for human rights, anticorruption and bribery, diversity on company boards.

Global Developments in the market

Science-Based Targets Inititiave (SBTi)

Provides a clearly defined pathway for companies to reduce greenhouse gas (GHG) emissions.

- (Voluntary) Corporate targets
- SBTi is a partnership between: Carbon Disclosure Project (CDP), United Nations Global Compact, World Resources Institute (WRI), World Wide Fund for Nature (WWF)
- The company publicly reports its company wide GHG emissions inventory and progress against published targets on an annual basis.

SBTi: FLAG

Forest, Land and Agriculture (FLAG) specifies the guidance of land use change and other land management factors.

 Relevant for sectors: food production (animal sourced); food and beverage processing; food and staples retailing

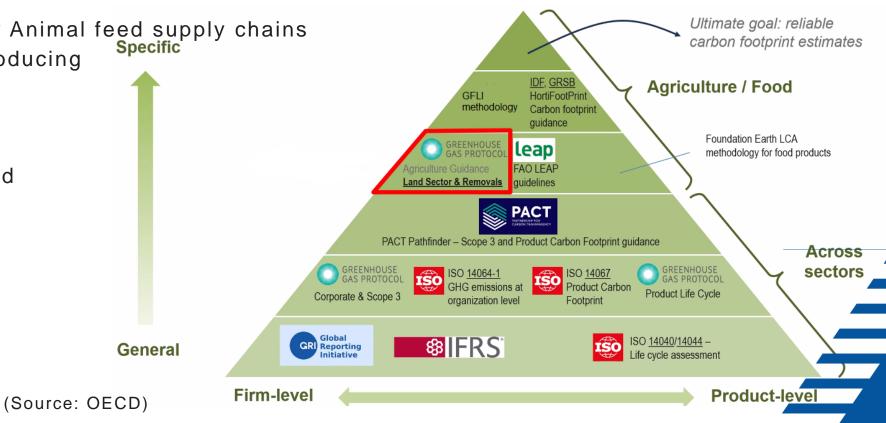
Database methodology

Transparency and best practices

The GFLI methodology is compliant with internationally recognized methodologies:

- FAO-LEAP guidelines for Animal feed supply chains
- PEFCR Feed for food producing animals

Both methodologies have a different level of specificity regarding data collection and conformity.



Methodology behind Land Use Change

GFLI & PEFCR Feed methodology

- Need to obtain evidence that the commodities in the supply chain did not come from crops that contributed to a 'change in land use' in the past 20 years (PAS2050)
- In case the evidence is not obtained, a default Land Use Change penalty (additional carbon emissions) must be taken into account in the total carbon footprint of the product
- In LCA terms, soy is not (completely) deforestation-free when the 20-year arable land use is not demonstrated
- Origin tracing and company-specific data matter!
- Oriented towards assessing the past



Alignment with GHG Protocol/SBTi

Current database

Current understanding indicates that GFLI members are already using the GFLI database as a fallback option for the full corporate reporting scope.

Relevant to mention that for SBTi, consistency is most important. This gives an incentive to use the same data sources, which increases the relevance of the GFLI database (i.e., delivering on product level with the GFLI methodology, whereas SBT are corporate goals).

GFLI's position is to ease the difficulties in the methodological landscape of LCAs by providing a practical and conclusive database on feed emissions. The broad usability of the database is key, therefore the GFLI is looking into alignment with all major methodological developments on our radar.

Amortisation of Land Use Change

Discrepancies

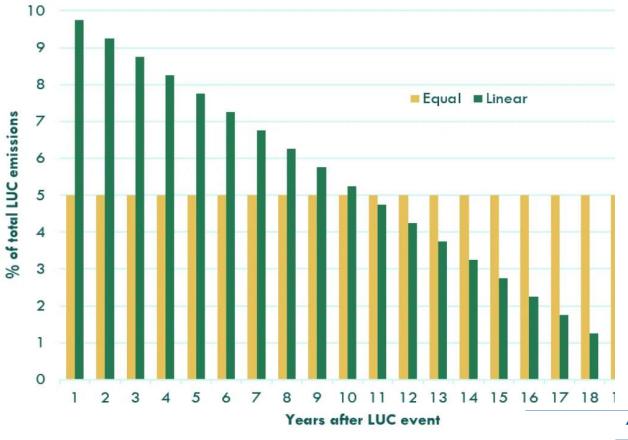
PEF & GFLI method:

• Equal discounting: equal distribution of emission with a 20 year cut-off. Each year, 5% of the emissions are included in the LCA

• Abrupt stop of LUC emissions after 20-year period

FLAG method:

- Linear discounting: emissions are greatest right after the land use change has taken place, with linear reduction of emissions until it reaches zero
- Data should be available for all intermediate years



Alignment with GHG Protocol/SBTi

Future developments

GFLI members have indicated the importance of the GFLI database to also be aligned with the FLAG, so the corporate members can set SB targets confidently.

The GFLI Board and Technical Management Committee will on the short term discuss the possibilities of achieving alignment. This requires various discussions from: a) technical and also b) practical use perspectives.

From a user perspective, various topics may be relevant to discuss in order to avoid confusion which may arise when data calculated using two different LUC methods are included in the database.

At a broader scale, the development of one agreed upon LUC method would be most beneficial, but ultimately may be impossible due to the global progressions of LCA & LUC research.

Alignment with GHG Protocol/SBTi

Future developments

On a more technical level, there are still open questions regarding the amortization of data-in projects executed in the past.

- How exactly do database users foresee the use of this data, and what level of detail are they requiring?
- Understanding which LUC was considered during the project and at what year is it currently;
- Is it worthwhile doing this execution with nearly out-of-date datasets that are set to be updated before 2025?
- How to account for the annual change in LUC emissions in the database (additional database updates?)

BRANDED DATA & CHAIN OF CUSTODY



The GFLI branded data methodology is created to be used by interested companies wanting to conduct an environmental assessment of their brand-specific products/ingredients compliant to the guidelines of the Global Feed LCA Institute.

The aim of the GFLI branded data is providing guidance for a company-specific LCA dataset that considers the full chain of custody through reliable, quantitative and, ideally, primary data.

Defensed inventory/impact assessment (LCI/A) data for a feed ingredient marketed under a certain brand and owned by a company or other entity and should present representative data of the company and its chain of custody".



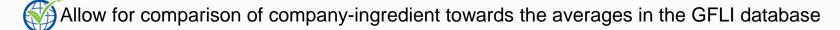


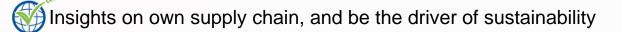
Branded data plays a role in identifying the company-specific supply chain through the use of high quality primary data.



Give insight to the company's emissions in order to track sustainability over multiple years

Allow for sustainability reporting through a recognized methodology





Marketing and communication purposes



Integrating certification into LUC emissions accounting

Definition

According to the GHG protocol:

- Certifications may be integrated in LUC accounting calculations when companies have information about the objective of the certification scheme, the timeframe and level of traceability it covers, its assurance and verification process, and the boundary covered (e.g., primary and secondary forest)
- Certification schemes must include cut-off date and chain of custody model (ISO 22095:2020) that ensures an adequate level of physical traceability
 - (16.3.4) Considered good enough: Identity Preserved, Segregation, Controlled Blending ("site-level mass balance")
 - Considered not good enough: Mass Balance, Book & Claim Credits

GFLI branded data Methodology

Chain of custody

'The custodial sequence that occurs as ownership or control of the material supply is transferred from one custodian to another in the supply chain' (Adapted from: WB, WWF Alliance for Forest Conservation and Sustainable Use, 2002)

While the branded data methodology (at this point) will not require documentation supporting such a system, it indicates the shared responsibility for the production of an ingredient and structures this in terminology the GFLI upholds. These can be categorized in multiple models with various properties, including but not limited to:

- Identity preservation
- Segregation
- Mass balance, divided into batch level, site level, and group level
- Certificate trading

Each model qualifies for a level of (physical) traceability of their ingredient.

GFLI branded data Methodology

Chain of custody

Through the GFLI branded data methodology and the reasoning of chain of custody; responsibility shall be taken by those participating in GFLI branded data.

The GFLI will evaluate the progression of branded data and increase in diligence for emission calculations to maintain a credible but realistic validation source.

So concluding, the GFLI branded data is a way of benchmarking and reporting ingredients following certification schemes, but does not fall under certification schemes itself.

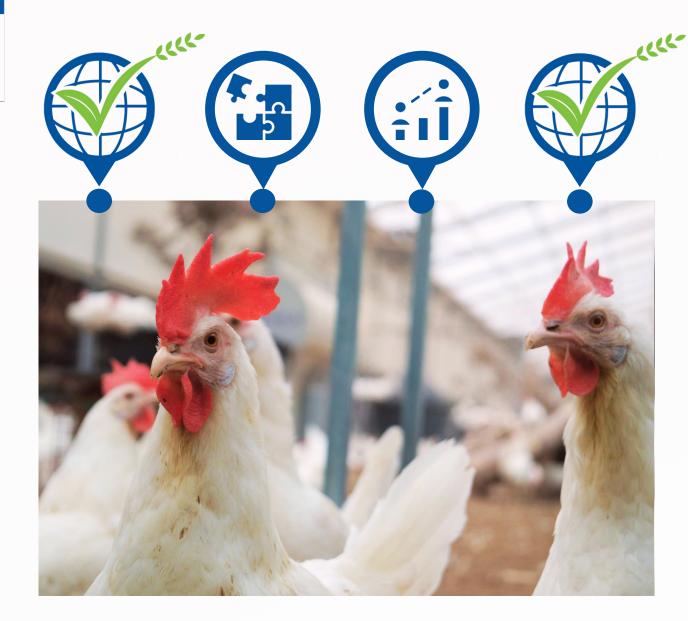
GFLI MEMBERSHIP

GFLI membership

Why?

GFLI offers membership to allow corporate and association front runners to collaborate precompetitively to help maintain and improve the GFLI database as well as engage with other stakeholders in the feed and food chain.

- Be recognized as a catalyst for continuous improvement
- Contribute to the resilience of the entire feed and food chain
- Impact the Institute's strategic direction (Board) and technical advances (TMC)
- Receive discounts on data licensing
- Participate in the Annual Membership
 Meeting



GFLI membership benefits

Member benefits

GFLI offers different benefits to the variety of organisations it comes in touch with.

Strategic partnerships

The GFLI is also looking for strategic partnerships to accelerate uptake of the database and brand familiarity in order to become the global reference for feed LCA.

How to become a GFLI Member:



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- Be recognized as a catalyst for continuous improvement
- Contribute to the resilience of the entire feed and food chain



- Discount for data access
- 2 hours of consultancy with our LCA expert to reach your sustainability goals
- · Discounts on additional consultancy hours
- Eligible to participate actively in the Institute by nominating representatives to the GFLI Board of Directors and Technical Management Committee
- Participation in working groups
- Invitation to the Annual Membership Meeting
- Members-only newsletter



Corporate members

Prices based on turnover of total revenues - \$ 6.500 - 11.500

- Access to the GFLI LCIA database (1 user)
- 30-50% discounts for commercial and developer use of the database in all 3 formats of the database
- 2 hours of consultancy with our LCA expert to reach your sustainability goals
- Discounts on additional consultancy hours and internal review for branded data
- Eligible to participate actively in the Institute by nominating representatives to the GFLI Board of Directors and Technical Management Committee
- Participation in working groups
- Invitation to the Annual Membership Meeting
- Members-only newsletter

Research Institutes

- Research license for discounted data use
- · Partnership to further data generation and precompetitive network for sustainable development

*Pricing based on 2023 fees.



Join the GFLI!

Interested in membership, providing or accessing data, or becoming a strategic partner? Let us help you meet your sustainability goals! Contact the GFLI Secretariat for more information at: <u>info@globalfeedlca.org</u>





Check out our website!

GFLI members

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Global Metrics for Sustainable Feed

THANK YOU

Laura Nobel

- +31 (0)68 684 65 81
- info@globalfeedlca.org
- www.globalfeedlca.org
- 8 Braillelaan 9, 2289CL Rijswijk The Netherlands

