Agri-footprint

Version 7.0

The world's leading source of environmental footprint data for the agri-food sector

May 2025

Mérieux NutriSciences | Blonk

www.blonksustainability.nl

Welcome to Agri-footprint

The world's leading source of environmental footprint data for the agri-food sector

Advancing sustainability in the global agri-food sector requires representative, clear, and comparable information. To meet this need, Mérieux NutriSciences | Blonk developed Agri-footprint which is a thorough and consistent life cycle inventory (LCI) database. The database is widely used and implemented by the agri-food industry, LCA community, scientific community, and governments worldwide.

Overview

What is Agri-footprint?

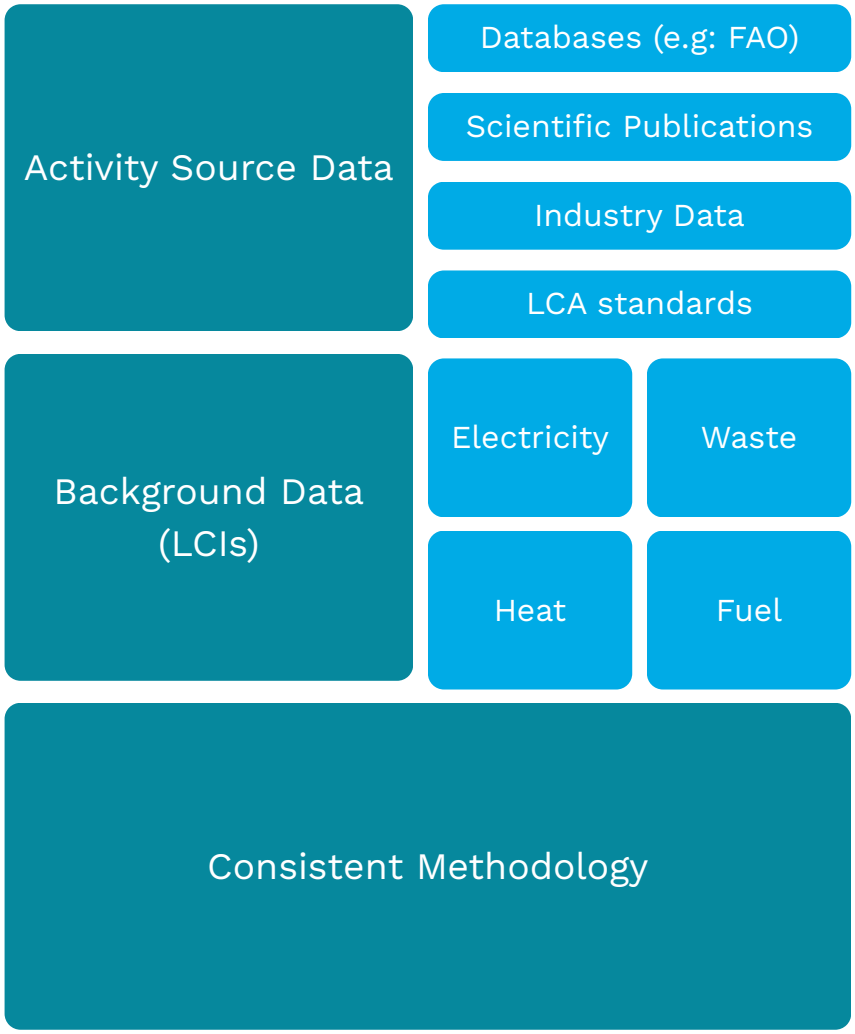
Agri-footprint is an LCI database comprised of secondary data covering more than **4,800 datasets** from **63+ countries**, representing the global food market. It primarily covers agricultural commodity production, processing, and market mixes of relevant products.

Key industries covered:

- Feed, including amino acids, vitamins, minerals
- Food, including ingredients relevant for food producers
- Agricultural intermediate products, including biofuels, palm oil, straw,etc.

What is Agri-footprint?

Source material, uses and features



Agri-footprint

- **4800+** datasets, most country specific
- **63+** countries
- **3 allocation options:** economic, mass and energy
- **Land Use Change** fully integrated
- **Transparent:** background methodology publicly available
- **Update Cycle** frequent updates

Available Data Types

Impact Result Level

DETAIL LEVEL

Product	Impact Category: Climate Change
Maize bran, at processing (FR)	Impact result: 1.4568 kg CO_2eq/unit
Barley grain, at farm (US)	Impact result: 1.9868 kg CO_2eq/unit

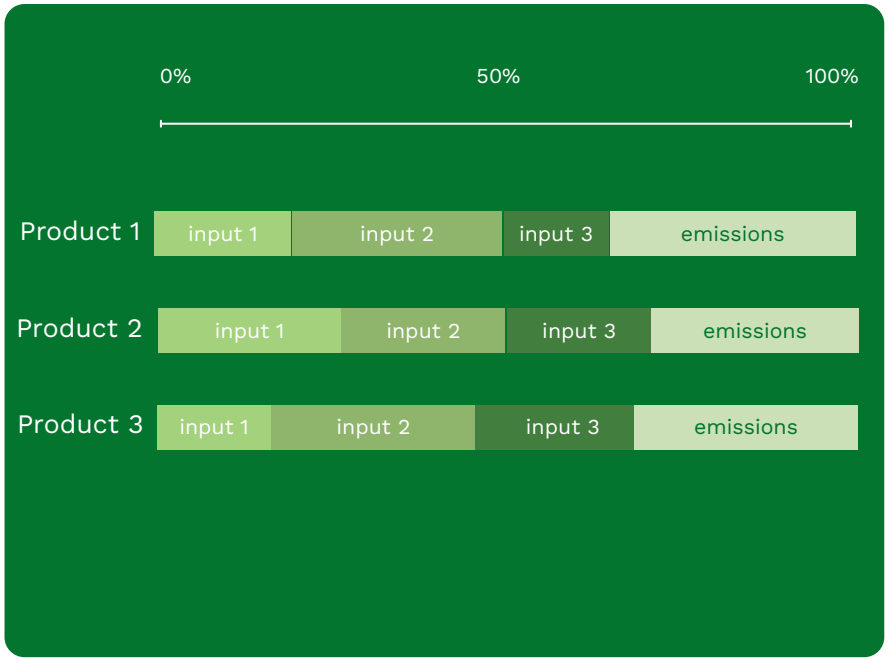
Description: Shows calculated impact results (LCIAs, Life Cycle Impact Assessments) for each product using the ReCiPe Midpoint (H) methodology without detailed information on how each process is composed

Advantages: Easy to use and interpret for all levels of LCA practitioners

Use cases: Quick estimation of impacts of different products and/or composition of products, high-level analysis, etc.

Unit Process Level

DETAIL LEVEL



Description: Shows detailed composition information for each process (e.g. inputs, outputs, emissions), including the connection between processes.

Advantages: Most detailed data available

Use cases: Full contribution analysis, product LCA studies, LCA comparison studies, etc.

Comparison Data Types

Use Cases

	Impact Process Level	Unit Process Level
To see an overview of calculated impact results	✓	
To calculate detailed result of each product, breaking down specific emissions		✓
To calculate detailed results for each process within a product, breaking down specific processes		✓
To calculate results according to different impact methods		✓
To perform detailed contribution analysis		✓
To calculate Scope 3 emissions	✓	✓
To manage environmental footprint reporting	✓	✓
To use Agri-footprint in your own tool or software solution (with a Developer License)	✓	✓
Require processing using impact assessment method and a calculation engine		✓

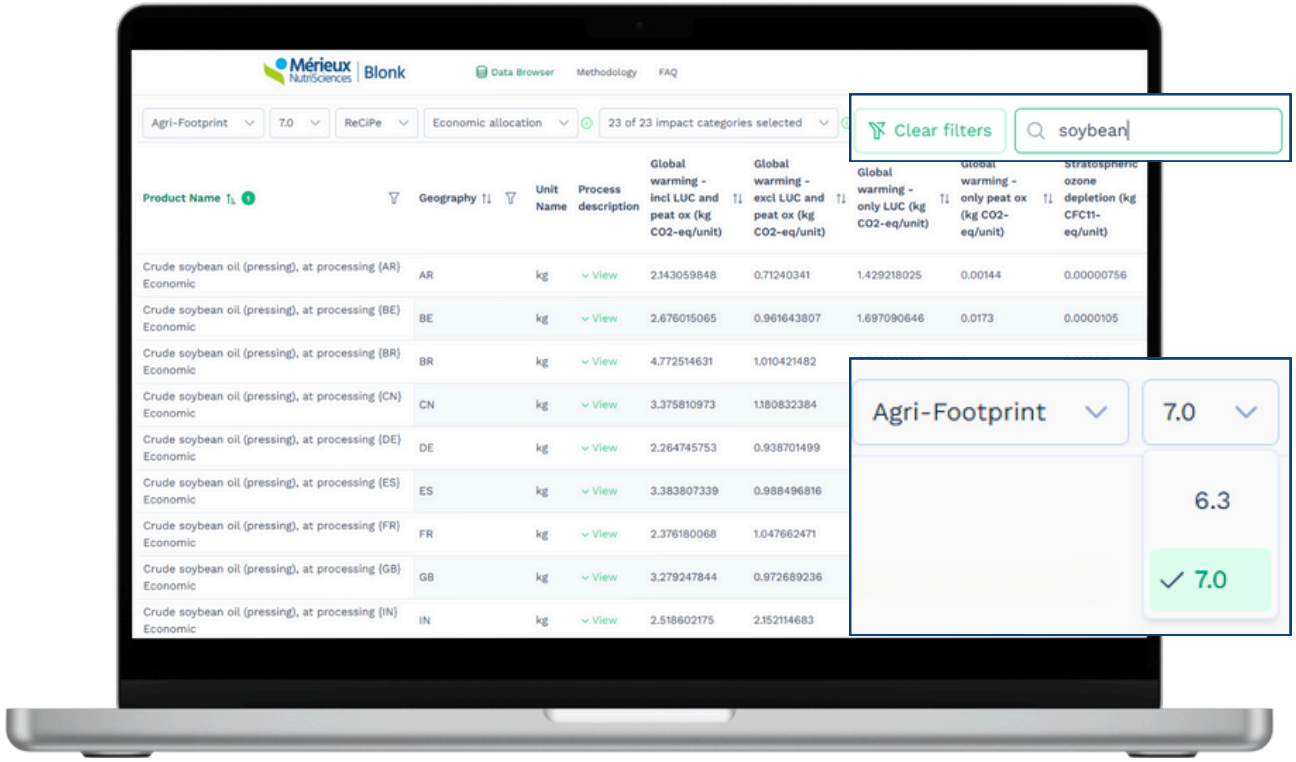
License Types

Agri-footprint 7.0

	Commercial License	Consultancy License	Developer License	Enterprise License
Licensee Profile	Businesses, for-profit companies, NGOs	Consultancies	Service providers implementing data in software + tools	Large-scale organizations and their affiliates
Number of end users	Max. 2 users	Max. 10 users	Max. 50 users	Max. 50 users
Integration	**Internal use only** Not for use with other internal or external tools & services	**External Sharing:** Outputs can be shared with external clients. Can be integrated within internal tools, software, or services - for internal use only	**Internal & External Use** External Integration: Can be integrated into tools, software, and services intended for external sale or distribution	**Internal Use Only:** Can be integrated into internal tools, software, or services across different internal divisions within the organization
Subscription Type	Annual	Annual	Annual	Annual

Blonk Data Hub

A cloud based web version of the database



The cloud-based **Blonk Data Hub** allows you to access Agri-footprint database in a faster and more user-friendly way. You can now move away from tedious and complex spreadsheets to a smarter, faster and more efficient way of accessing environmental impact data.

With the Blonk Data Hub you can:

- Instantly search and filter datasets through an intuitive interface.
- Access data sources, background methodologies and process insights via a few simple clicks
- Easily switch between different Agri-footprint versions (based on your license types)

Version Comparison

AFP 6.3 vs AFP 7.0

	Agri-footprint 6.3	Agri-footprint 7.0
Methodology used	ReCiPe 2016	ReCiPe 2016
Available license types	Research Commercial Developer	Research **Consultancy** Commercial Developer **Enterprise**
Ecoinvent background data	3.8	3.10
FAO stats	5 year average (2014-2018)	5 year average (2018-2022)
LUC data	3 year average from FAO (2015)	Latest 3 year average from FAO (2019)
Number of items included	4800+	4800+
Impact categories available	• Carbon footprint + LUC Impact Only • All impact categories	• Carbon footprint + LUC Impact Only • All impact categories

Version Comparison

AFP 6.3 vs AFP 7.0

	Agri-footprint 6.3	Agri-footprint 7.0
Data levels available	• Impact Result Level (XLS) • System Process Level (JSON) • Unit Process Level (JSON)	• Impact Result Level (Blonk Data Hub) • Unit Process Level (JSON)
In SimaPro	Yes	Will be available in autumn 2025
In OpenLCA	Yes	Will be available in summer 2025
Methodology documents	Agri-footprint Methodology parts 1-3.	Agri-footprint Methodology parts 1-2 updated. Part 3 remains as part of previous version documentation.

Get in touch

Agri-footprint is available in a range of license types and formats to suit your business needs. Whether you are a small team or a large enterprise, our experts can help you choose the ideal option for you.

Based on your organization's size, number of users, and integration requirements, get in touch with our team to guide you.

info@blonksustainability.nl
+31 (0) 182 579 970
www.blonksustainability.nl/agri-footprint

Agri-footprint

Annex I: Impact Categories

Agri-footprint - all impact categories

- Global warming - incl LUC and peat ox (kg CO2-eq/unit)
- Global warming - excl LUC and peat ox (kg CO2-eq/unit)
- Global warming - only LUC (kg CO2-eq/unit)
- Global warming - only peat ox (kg CO2-eq/unit)
- Stratospheric ozone depletion (kg CFC11-eq/unit)
- Ionizing radiation (kBq Co-60-eq/unit)
- Ozone formation, Human health (kg NOx-eq/unit)
- Fine particulate matter formation (kg PM2.5-eq/unit)
- Ozone formation, Terrestrial ecosystems (kg NOx-eq/unit)
- Terrestrial acidification (kg SO2-eq/unit)
- Freshwater eutrophication (kg P-eq/unit)
- Marine eutrophication (kg N-eq/unit)
- Terrestrial ecotoxicity (kg 1,4-DCB eq/unit)
- Freshwater ecotoxicity (kg 1,4-DCB eq/unit)
- Marine ecotoxicity (kg 1,4-DCB eq/unit)
- Human carcinogenic toxicity (kg 1,4-DBC eq/unit)
- Human non-carcinogenic toxicity (kg 1,4-DBC eq/unit)
- Land use - Total (m2a crop-eq/unit)
- Land use - Transformation (m2a crop-eq/unit)
- Land occupation (m2a/unit)
- Mineral resource scarcity (kg Cu-eq/unit)
- Fossil resource scarcity (kg oil-eq/unit)
- Water consumption (m3/unit)

Annex II: Data updates

Title	Description
Total "land transformations to" and "from" is now totalled to 1 hectare	Total "land transformations to" and "from" is now totaled to 1 hectare, by including transformations from and to from the same crop. This change was implemented based on feedback we received from Rafeal Horn (Fraunhofer) Still, this is applied for arable cultivations, and not for orchard and grass
NPK (total fertilizer data)	FAO, IFAstat updates. The data is updated to 2018-2022, forming a new 5-year average NPK data is updated using the latest data from the NPK model
Crop residue calculations	Crop residue calculations for 5 categories of roughages where updated/improved. Instead of “Generic values other crops” more specific data is used, using IPCC calculations rules. The category used is more specific with the characteristics of the roughage in study.
Manure statistics data for crops	The values for manure are updated for all crops based on FAOstat data and some roughages (indirectly from FAOstat data). The data is updated to 2018-2022, forming a new 5-year average
Pesticides active ingredients data	Pesticide active ingredients used in the model calculation were updated to 2018-2022 years period frio FAOstat.

Annex II: Data updates

Title	Description
Starting material seed data update	The values for start material are updated from FAO stat, using average global statistics. For some crops, other crops are used as proxies or literature. The data is updated to 2018-2022 FAO stat, or proxy for crops or literature data.
LUC data update	Update LUC data (equal amortization allocation methodology) based on the Land Use Change Model (https://blonksustainability.nl/luc-impact) The data is updated to 2021.
NPK Split update (fertilizer ratio)	Country consumption data reported by IFAstat is updated for a 5 years average period 2018-2022 (https://www.ifastat.org/consumption/fertilizer-use-by-crop) of specific fertilizers.
Production trade data update	Was updated for EFSA. Is therefore included in AFP7 as a change from 6.3. The data should be updated to 2018-2022, forming a new 5-year average