

Summary

KMC Life-Cycle Assessment, PotaPro 1500

This Life-Cycle Assessment (LCA) evaluates the environmental footprint of producing 1 ton of PotaPro 1500, a potato protein with 90% dry matter content, in accordance with the GFLI guidelines. The production of PotaPro 1500 takes place at the AKD and AKK facilities (Denmark), with KMC (Denmark) managing the buying and selling. High-quality production data, specific to each site, have been gathered over the past three years (2021-2024), ensuring reliable and precise results.

The study has been prepared by Better Green and has been critically reviewed by GFLI and LCA Specialists.

The system boundary is cradle-to-gate and includes:

1. **Raw material procurement** – potatoes, chemicals, groundwater
2. **Transportation** – delivery of raw materials to production sites
3. **Production processes** – energy consumption and waste management

As required by GFLI guidelines, the results are presented using two Life Cycle Impact Assessment (LCIA) methods (EF 3.1 and ReCiPe 2016 (H) Midpoint) and three allocation approaches (mass-based, economic, and energy/calorific values).

The climate change impacts presented below include both land use change (LUC) and peat oxidation and is a weighted average across the production sites:

Table 1 – The calculated climate footprint for PotaPro 1500 (weighted average)

LCIA method	Total (kg CO ₂ e / ton)	Allocation method
EF 3.1	1.062	Dry mass
	1.499	Economic
	1.163	Energy (calorific)
ReCiPe 2016 (H) Midpoint	1.065	Dry mass
	1.489	Economic
	1.161	Energy (calorific)

This summary focuses on the climate footprint of the products, but the LCA study also assesses other environmental impacts as included in the EF3.1 and ReCiPe 2016 (H) Midpoint LCIA methods. Hence, the LCA study provides a comprehensive baseline for understanding and reducing the environmental impacts of PotaPro 1500.