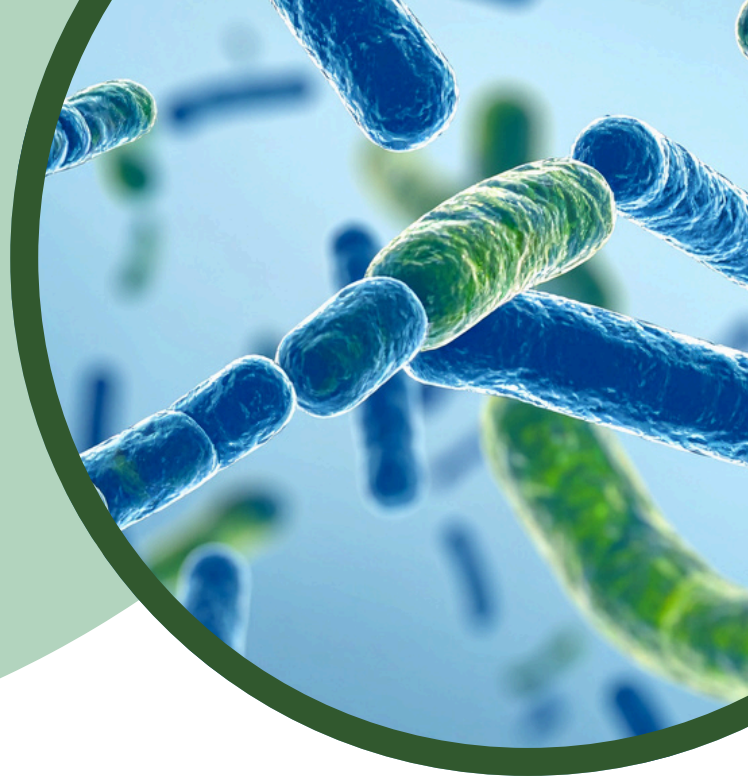


Case Study

*Yeast pro/postbiotics
usage and impact on
CO₂ reduction in Europe*



Overview

In an effort to achieve sustainable improvements, the use of specific yeast probiotics and postbiotics in ruminant and poultry feed could reduce by up to 2.5% the global CO₂ emissions out of the 502 Mt eq CO₂ generated by livestock in Europe per year – equivalent to removing 9.7 million out of 250 million new cars from EU roads per year or planting of 568 million trees!

Impact

Results showed reductions of carbon footprint of animal production when using probiotics and postbiotics:

- -5% CO₂ eq per kg of milk when using probiotics (early/mid lactation in dairy)
- -5% CO₂ eq per kg of live body weight when using probiotics (fattening beef)
- -8.4% CO₂ eq per kg of live body weight when using postbiotics (full cycle broilers)

As the % reduction in LCA is based on a specific supplementation period, the total CO₂ saved is calculated on the average value obtained in kg CO₂ eq / kg milk or meat for the full animal production period.

Supporting Materials:

- [Quantification of the Environmental Impact of Feeding Yeast Probiotic *Saccharomyces cerevisiae* Actisaf Sc 47 in Dairy Cow: A Life Cycle Assessment Approach](#)
- [Does the Use of the Yeast Probiotic *Saccharomyces cerevisiae* Actisaf Sc 47 Reduce the Environmental Impacts of Beef Cattle? A Study Based on Life Cycle Assessment](#)
- [Phileo by Lesaffre addresses agricultural challenges with the first yeast probiotic with Life Cycle Assessment from cradle to farm gate](#)
- [Advancing Sustainability in Dairy and Beef Production](#)
- [Collaborating For A Sustainable Poultry Future](#)

Additional sources:

- FAO, EUROSTAT EU27 2023
- Statista Research Department
- European Commission Climate change

*This sustainability-related case study was provided by **Phileo by Lesaffre**.*

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