

How Evonik is contributing to a sustainable food system

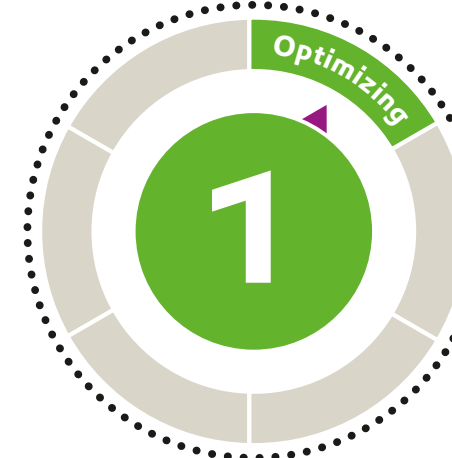


BECAUSE
IT'S ALL
ABOUT **LIFE**

SIX IMPACT AREAS



Our products and solutions target six different impact areas that are key to sustainable animal production.



OPTIMIZING RESOURCE USE IN FEED AND FARMING

1. Lowering FCR through functional feed additives and amino acid supplementation
2. Avoiding land and water use through lower inclusion rate of feed raw materials
3. Improving plant nutrition with sustainably-produced fertilizers



REDUCING GHG AND NUTRIENT EMISSIONS IN ANIMAL PROTEIN PRODUCTION

1. Avoiding GHG emissions through amino acid supplementation, leading to lower feed raw material inclusion rate from land-use-change areas
2. Avoiding nitrogen emissions through amino acid supplementation, leading to lower feed raw material inclusion rate and lower animal excretion of nitrogen



ENHANCING ANIMAL HEALTH AND PERFORMANCE

1. Enhancing animal health, nutrient uptake and resilience through functional feed additives
2. Early warning and diagnosis of poultry health threats with digital monitoring tools
3. Improving pig & broiler performance under heat stress through amino acid supplementation



FIGHTING ANTIBIOTIC RESISTANCE

1. Supporting antibiotic-free strategies with functional feed additives



PROTECTING BIODIVERSITY ON LAND AND BELOW WATER

1. Reducing reliance on feed raw materials from land-use-change areas with amino acids
2. Reducing reliance on fish oil through Veramaris algal oil



MEASURING AND OPTIMIZING NUTRITIONAL AND SUSTAINABILITY OUTCOMES

1. Expert consulting to measure, optimize and communicate nutritional and sustainability performance from feed to farm with inoSust®
2. Ensure product quality through near-infrared spectrometry and nutritional consulting
3. Tailored dosing and handling solutions to unlock additional production efficiency

MILESTONES

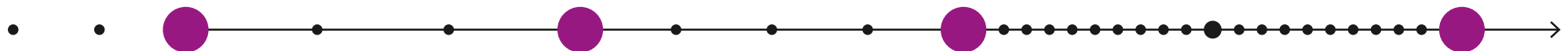


2023

2026

2030

2050



Since 2023, 4 of 6 production sites are using **100% green** electricity

By end-2026, 5 of 6 production sites will use **100% green** electricity

From 2026 onwards, we aim to **increase** the use of **green electricity** at our 6th site

By 2030, achieve Science-Based Targets to **reduce** absolute Scope 1 & 2 emissions by **25%** and absolute Scope 3 emissions by **11%** against 2021 baseline

By 2050: raise GHG **target ambition** to align with limiting global warming to **1.5 °C** by 2050

Optimizing resource use

1 KG METHIONINE AS PART OF EVONIK’S LOW CRUDE PROTEIN* RECOMMENDATION ENABLES THE REPLACEMENT OF 67 KG SOYBEAN MEAL IN BROILER FEED



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■ Soybean meal → ■ MetAMINO®

*Evonik’s low crude protein recommendation, including essential amino acids such as MetAMINO®, ThreAMINO®, Biolys® and others, consist of expert formulations that minimize crude protein content while ensuring optimal nutrition and performance of Animals


Reliable sustainability data

FOOTPRINT REDUCTION DRIVEN BY EXTERNALLY-CERTIFIED LCA CALCULATION METHODS

Sustainability data you can trust

- Evonik’s in-house Lifecycle Management Team conducts regular lifecycle assessments (LCAs) of our products
- This ensures we:
 - Measure our footprint in line with global best practices
 - Improve our performance on a continuous basis
 - Communicate sustainability data our stakeholders can trust

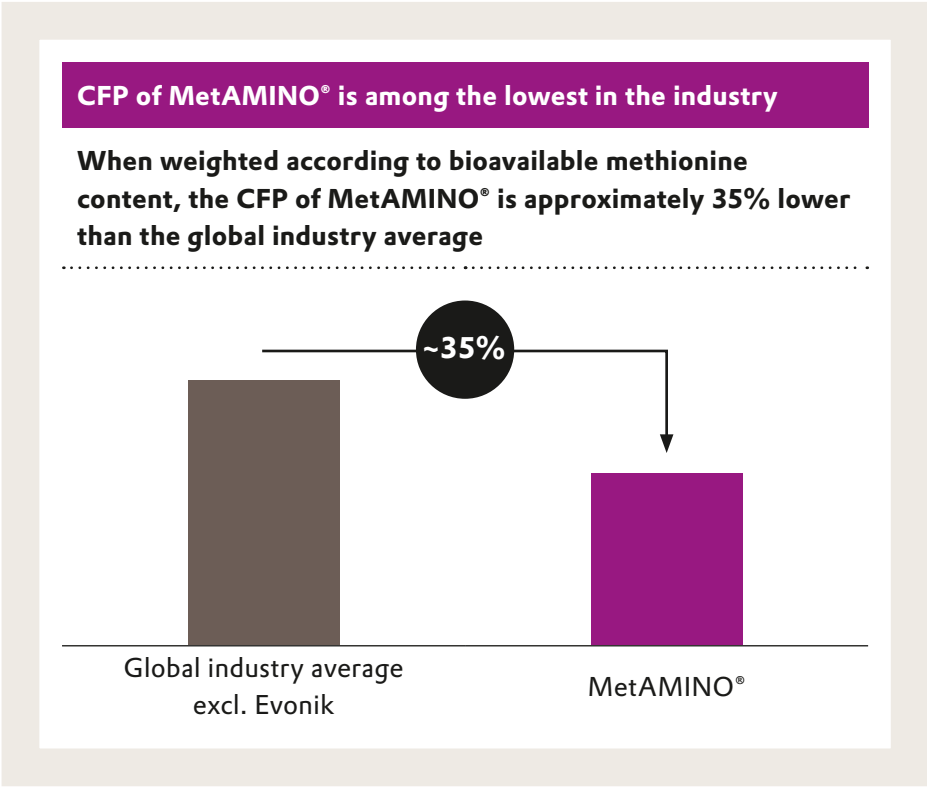
LCA calculation methodology externally certified against ISO standards 14040, 14044 & 14067 and Together for Sustainability Product Carbon Footprint guidelines



Comparative Life Cycle Assessment
www.tuv.com
ID 0000027153

Reducing our footprint

MetAMINO® CARBON FOOTPRINT (CFP) IS 35% LOWER THAN THE GLOBAL AVERAGE



Methodology for MetAMINO® CFP: Product Environmental Footprint Category Rules (PEFCR), excluding biogenic carbon, including land use change, cradle to gate (Scope 1, 2 and Scope 3 upstream). LCA calculation and reporting follow the ISO 14040/44, ISO 14067 and TFS guidelines.

Methodology for global and Chinese industry averages: estimated internally by Evonik’s market intelligence, technology and lifecycle assessment experts. The global industry average is estimated based on producers covering >90% of total global production volume. The Chinese industry average estimate is based on producers covering >95% of total Chinese production volume. Industry methionine sources include DL-methionine, L-methionine and methionine hydroxy analogue (MHA). Global Warming Potential is estimated accounting for higher bioavailability of methionine in MetAMINO® versus MHA. Data valid as of April 2024.

EVONIK OPERATIONS GMBH

Nutrition & Care

Animal Nutrition Business Line

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