
NAVIGATE.
SUSTAIN.
SUCCEED.
WITH OUR
CARBON
REDUCTION
PROGRAMME
DAIRY
trouw nutrition
a Nutreco company

DRIVING SUSTAINABILITY IN DAIRY FARMING

The dairy industry faces increasing pressure to reduce its environmental impact, with carbon emissions at the farm level being a primary concern. Farmers, feed advisors, processors, and retailers all play a crucial role in implementing sustainable solutions throughout the supply chain.

As climate targets become more urgent, the industry must act swiftly to accelerate change.

Achieving meaningful reductions requires collaboration and a data-driven, science-based approach that integrates advancements in precision farming techniques.

Trouw Nutrition's new Carbon Reduction Programme Dairy is a comprehensive suite of unique nutritional solutions designed to support the animal from calf to 5th lactation.

The programme aims to support stakeholders reduce carbon emissions while maintaining productivity and improving profitability.

Our commitment to sustainability

The Carbon Reduction Programme Dairy is the latest advancement in our expanding portfolio of science-driven solutions designed to reduce emissions in the animal protein value chain. Grounded in decades of research in animal nutrition, our innovative products, data-driven services, and precision feed management strategies enable producers to enhance sustainability while optimising productivity and profitability.

With the right strategies in place, dairy producers can NAVIGATE evolving sustainability challenges, SUSTAIN efficient and responsible production, and SUCCEED in a competitive and rapidly changing industry. By integrating proven sustainability practices across the value chain, we can drive measurable progress towards lower emissions and improved resource efficiency. Partner with us to implement science-based solutions that ensure long-term viability, regulatory compliance, and a more sustainable future for dairy production.



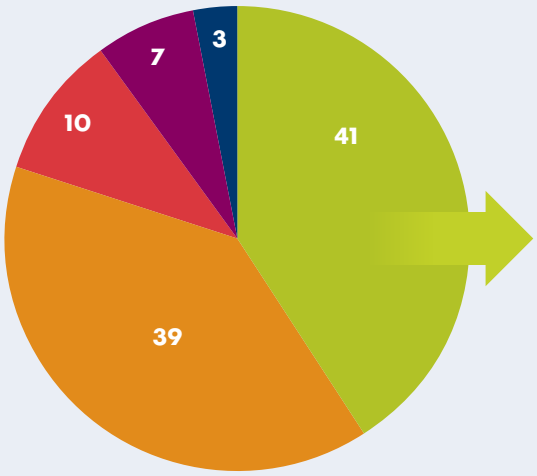
HOW NUTRITION CONTRIBUTES TO CARBON EMISSIONS

Agriculture plays a vital role in building a sustainable future by ensuring food security, supporting economic growth, and driving innovation to address global challenges.

The sector continues to evolve, with dairy farming adopting new technologies and regenerative practices that enhance productivity while improving environmental outcomes. By optimising farm efficiency, nutrient use, and methane reduction strategies, agriculture is making measurable progress towards sustainability goals. Consumers, regulators, and industry stakeholders increasingly recognise these efforts and the sector's commitment to transparency. Scientific advancements in regenerative farming, dietary innovations, and feed additives offer promising solutions to reduce emissions while maintaining productivity. Since **feed production** and **enteric methane** account for approximately 70–80% of milk's carbon footprint, targeted innovations in these areas create new opportunities for a more resilient, climate-smart food system.

This highlights the need for collaboration and partnership for a **holistic nutritional approach** to effectively reduce emissions.

Carbon footprint per kg of FCPM



How feed contributes to carbon emissions

1. Diet that animals eat
2. Purchased feeds
3. Formulation of diet
4. Number of animals eating the diet
5. Efficiency of animals to convert feed to milk

Feed | Enteric fermentation | Manure management | Nitrous oxide | Energy

* This is an example and percentages (%) may vary by region.

IMPACTFUL STRATEGIES: OPTIMISE THE PRODUCTIVE LIFE OF YOUR HERD

The key factor in our holistic approach to reducing the carbon footprint per kg of fat-and-protein corrected milk is to optimise herd performance and structure.

The programme gives you access to a wide range of tailored nutritional solutions designed to unlock genetic potential and boost the health and performance of dairy cows throughout their life cycle.

ENVIRONMENTAL FOOTPRINT MEASURED BY MYMILKPRINT

PRECISION NUTRITION

CALF
Epigenetics



Unlocking genetic potential

HEIFER
Development



Age at first calving 22-24 months

TRANSITION
Resilience



Reduced incidence of challenge

MILK COW
Productivity



Sustained peak yield at 50-70 DIM

LACTATIONS
Longevity



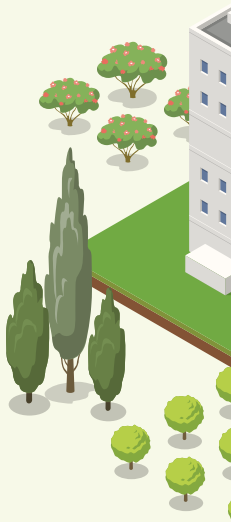
Complete a healthy 5th lactation

LIFESTART
SETS LIFE PERFORMANCE

HEALTHYLIFE
SUSTAINABLE LIFETIME PERFORMANCE

RESPONSIBLE MINERALS

STRATEGIES FOR IMPACTFUL CARBON REDUCTION PER KG OF MILK



Reducing the carbon footprint of dairy farming requires a holistic approach that optimises inputs while maintaining performance and profitability.

Key strategies include:

LifeStart
Optimising calf rearing to achieve first calving at 22-24 months, reducing emissions by **6%** per kg FPCM.

HealthyLife
Improving culling and replacement rates to optimise herd structure, cutting emissions by **~5%**.

Precision Nutrition
Enhancing diet formulation and maximising milk from forage to lower purchased feed and methane emissions, improving feed efficiency and reducing footprint by up to **10%**.

Responsible Minerals
Ensuring responsible mineral nutrition to minimise excretion, enhance performance and support lowered emissions by **2.6%**.



MyFeedPrint
Calculating raw material and compound feed footprint at the feed mill with the potential to halve emissions associated per tonne of feed and reduce footprint by **9%**.

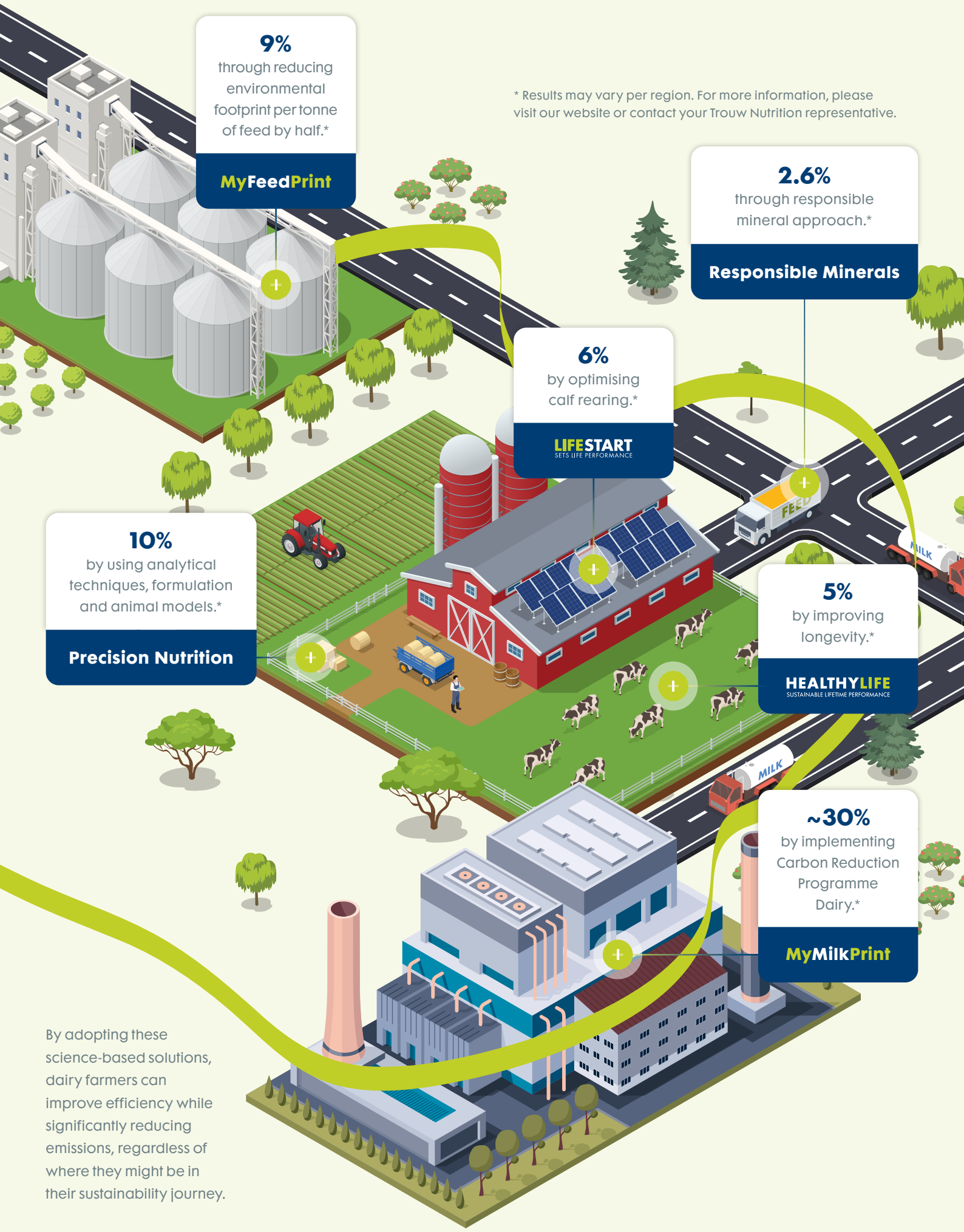
MyMilkPrint
Establishing a baseline carbon footprint and modelling farm-level improvements for sustained reductions of approximately **30%**.

Benefits

Expert guidance
Through targeted, ready-to-implement strategies, we provide expert guidance tailored to the specific needs of each stakeholder in the dairy value chain.

Enhanced collaboration
Developing a platform to foster collaboration and knowledge-sharing, we empower our partners with the insights and tools necessary to meet industry targets.

Tailored approach
Tailored advice and support are offered at every stage of the process, regardless of the starting point.



* Results may vary per region. For more information, please visit our website or contact your Trouw Nutrition representative.

By adopting these science-based solutions, dairy farmers can improve efficiency while significantly reducing emissions, regardless of where they might be in their sustainability journey.

YOUR FIRST STEP TO A LOWER CARBON FOOTPRINT

MyFeedPrint is an advanced digital platform designed to provide accurate, science-based insights into the environmental footprint of animal feed. Using lifecycle assessment (LCA) methodologies and extensive global databases, it enables accurate calculations of emissions associated with feed ingredients, energy use for production and formulations.

MyFeedPrint provides opportunities to optimise feed choices, reducing environmental impact while maintaining nutritional quality. Providing insights on country of origin, distance travelled and by which mode of transport and energy use at the feed mill, compound feed producers can gain the best insights into the environmental impacts of their feeds.

The benefits of MyFeedPrint

- Easy to use
- Regular, automatic updates
- Comprehensive datasets
- Accurate calculations*

* Follows PEFCR methodology with calculations verified ISO compliant (ISO 14040/44) and provides confidence that calculations are of the highest quality.

ACTIONABLE INSIGHTS TO SUPPORT SUSTAINABLE DAIRY

MyMilkPrint is a vital tool for establishing a baseline carbon footprint and guiding us towards effective on-farm solutions for carbon reduction. It provides practical, proven strategies that help farmers NAVIGATE their sustainability journey, SUSTAIN a low carbon footprint, and SUCCEED in future-proofing their business for long-term resilience and efficiency.

Measure baseline

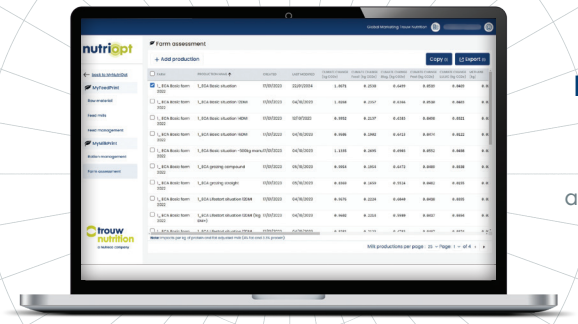
Measure your status using MyMilkPrint to establish a baseline carbon footprint per kilogram of fat-and-protein-corrected milk (FPCM), taking into account animal numbers, purchased and home-grown forages and feeds, rations, energy and manure management.

Measure, monitor and manage

Review every decision made on farm for the effect on carbon footprint using MyMilkPrint – measure progress, monitor steps taken to refine the plan, and manage and report your success.

Identify hot spots

Identify your emissions hotspots and model the potential impact of optimisation measures using our suite of digital tools.



MyMilkPrint

Establish a long-term plan

Use the variety of pillars and programmes within the Carbon Reduction Programme Dairy to establish a long-term emissions reduction roadmap with measurable KPIs to navigate your way to success.

Investigate impact of nutritional solutions

Analyse the effects of feeding and feed management from the calf stage to the fifth lactation cow, including the influence of purchased feeds, total diet composition, methane emissions, and herd dynamics.

Run scenario analysis

Use MyMilkPrint to evaluate the effects of the impact of nutritional solutions on productivity, profitability and carbon footprint.

WHAT OUR CUSTOMERS HAVE TO SAY ABOUT US

Implementing sustainable feed solutions provides a range of key benefits for all stakeholders in the dairy industry.



“Replacing soya hulls in the ration with a more sustainable sugar beet pulp was a quick win for us as it was cost effective and reduced carbon emissions. MyMilkPrint also highlighted opportunities to lower our farm’s replacement rate by improving transition protocols. We are focusing on reducing the age of first calving and tightening the spread of calving age to build more robust cows.

Looking ahead, we can reduce the footprint of compound feed by 6% by improving nitrogen use efficiency and lowering dietary crude protein levels with plans to explore amino acid nutrition. Combined with improvements in our replacement rate, optimising the age at first calving could reduce our farm’s carbon footprint by 13% within one to two years.”

DAVE BACON
Owner, Gleadthorpe Farm, UK



“MyMilkPrint showed me where to focus rather than just generating numbers on a report. I started with the low-hanging fruit, adjusting the feed rate and soya use, which led to quick wins including a 10% reduction in carbon footprint.

With the Carbon Reduction Programme Dairy, I no longer have to wait for the processor’s audit; I can review my results and make adjustments after every diet change with my nutritionist. I have found my passion again – I’m back doing what I love!”

NIGEL ARMSTRONG
Dairy Farm Manager, University of Nottingham, UK

Contact your Trouw Nutrition representative to discover how the Carbon Reduction Programme Dairy can help you optimise productivity, profitability and reduce your carbon footprint.



Learn more, visit
www.trouwnutrition.com/carbon-reduction-programme-dairy

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