



Trouw Nutrition

Profile presentation 2020

How to feed the **growing** world population in a **sustainable** way?



7,673,196,802



Environmental and societal concerns

Pressure on the planet, animal welfare, localism, ...



Struggling supplies

Volatility of raw material markets, trade barriers, ...



Surging demand

Farmers and Integrators



Public health concerns

Food safety, induced antibiotic resistance



Our purpose:

feeding
the future

How to get there?

A woman with long dark hair, wearing a light-colored jacket, carries a young child on her back. The child is wearing a light-colored knit hat and a pink jacket, and is pointing towards the horizon. They are standing in a cornfield at sunset, with the sun low on the horizon, creating a warm, golden glow. The sky is filled with soft, wispy clouds. The bottom of the image features a blue and green curved graphic element.

Our Vision

Creating a brighter future,
From planet to plate..

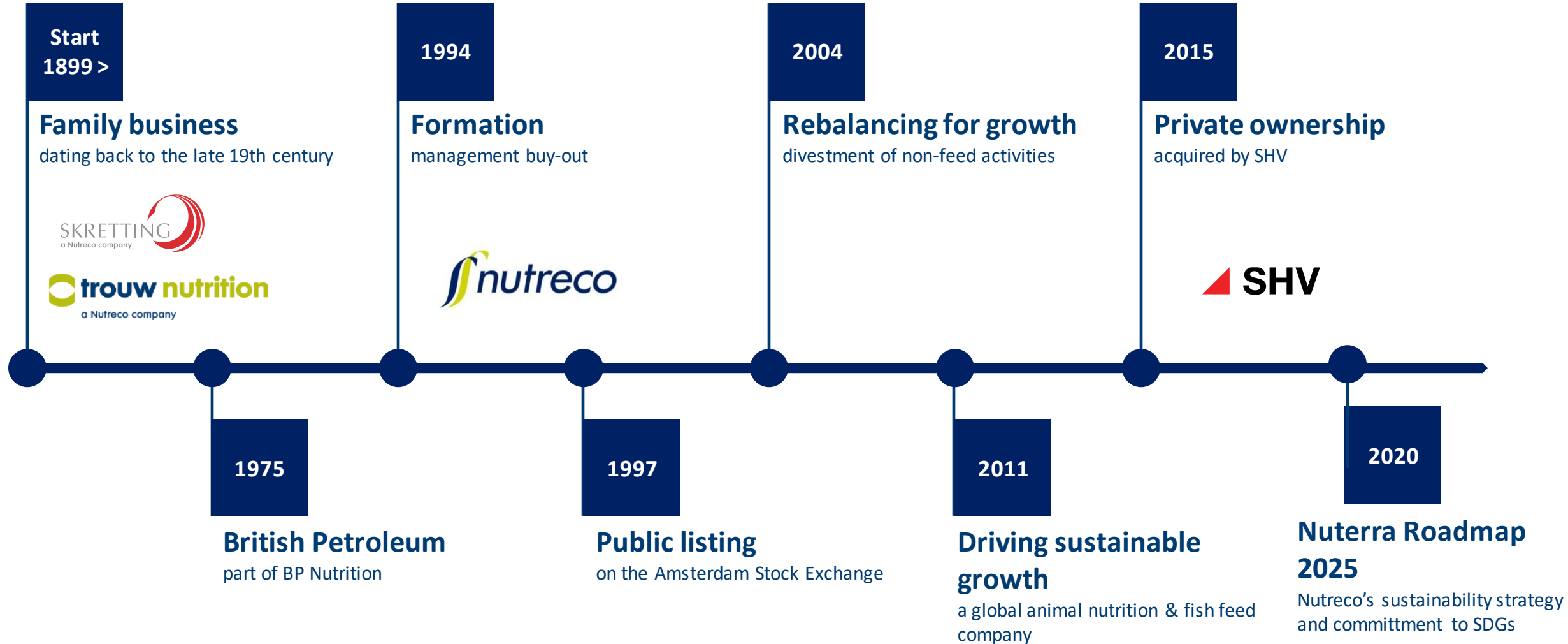
Where we come from

Trouw Nutrition,
Nutreco's animal nutrition division,
Part of the SHV family.



nutreco

Our history



We belong to **SHV** since 2015



Family company
founded in
1896



Sales of
€19.2
billion in 2019



Present in
58 countries



55,000
employees



SHV's Corporate Philosophy

SHV is a decentralised company. Great trust is placed in our people in the field. This decentralisation provides an excellent opportunity for individual development. Mutual respect and trust provides the basis for happiness at work.

	Philosophy	Values
Strategy	<ul style="list-style-type: none">• growth through performance• go for niche and market share• invest in people	SHV's most important values are: <ul style="list-style-type: none">• integrity• loyalty
Method	<ul style="list-style-type: none">• manage change• look for the unusual• listen, learn and react• keep things simple	

Being part of



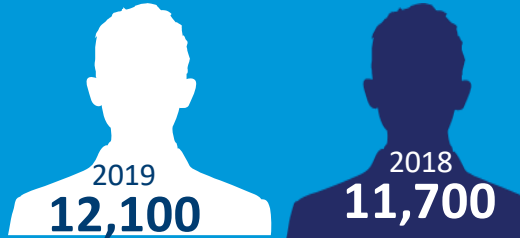
Nutreco today

>100

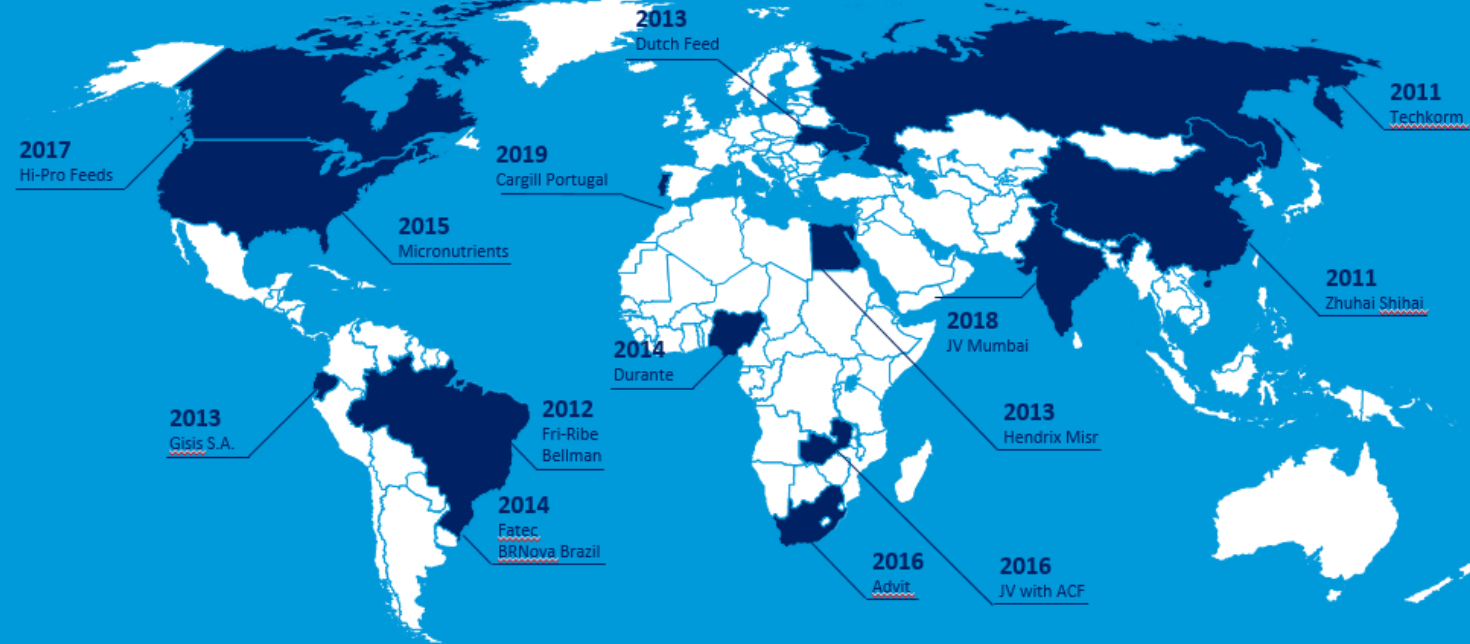
Production plants in 35 countries



Number of employees in FTE at year end



M&A activities



€6.4 billion Revenues



Employees per division

 8,300
a Nutreco company

 3,500
a Nutreco company

2020 Nutreco's Managing Board



Executive Board



Chief Executive Officer
Rob Koremans



Chief Financial Officer
Kees Dekker

Executive Committee



COO Nutreco
CEO Trouw Nutrition
Harm de Wildt



COO Nutreco
CEO Skretting
Therese Log Bergjord



Chief Innovation
Officer
Viggo Halseth



Chief HR
Officer
Martijn Roelants



Chief Strategy
Officer
Laurent Genet

Trouw Nutrition

2021 Trouw Nutrition's Managing Board

CEO Trouw Nutrition, COO Nutreco
Animal Nutrition Division
Saskia Korink



Division Management team



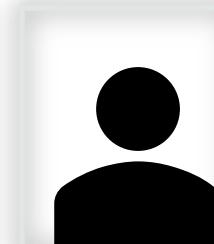
HR
Wichard Bieze



Finance
Titus Cunnen



Innovation
Silke Birlenbach



Global Operations
Vacancy



Procurement
Gerjan van Alst

Incl. Regional Managing Directors



MD Africa
Pieter Bastiaanssen



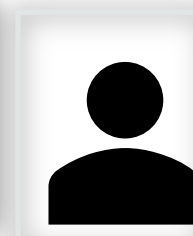
MD Canada
**Jacques
Leclerc**



MD ECAM
**Richard
Maatman**



MD Iberia
Pierre Couderc



MD LATAM
(Vacant)



MD USA
**Daniel
Baker**



MD Asia
**Jurrien
Zandbergen**

Trouw Nutrition's companies in a nutshell



Our Companies



Our Activities



Our Customers



Our Suppliers

- ✓ Trouw Nutrition is a global leader in innovative feed specialties, nutritional services and premixes (#2 premix producer globally, with a #1 position in Europe)

- ✓ Global leader in Animal Nutrition for Livestock and Companion Animals (Young Animal Feed/ Animal health products / Feed additives/ Premixes/Compound feed/ Farm minerals).

- ✓ Feed compounders, integrators, distributors, livestock farmers, companion animal industry and home mixers, wholesalers.

- ✓ Producers of grains, vegetable proteins, land animal products, amino acids, trace elements & minerals, vitamins, dairy products, preventive animal health products and organic acids

- ✓ leading compound feed producer in Iberia, (Spain and Portugal)

- ✓ Poultry products / Pig farming/ Trading and feed solutions primarily for poultry, pigs and ruminants

- ✓ pig meat processors

- ✓ Spain's leading pig-meat producer

- ✓ food industry and food service

- ✓ Spain's #2 largest poultry producer and chicken-meat processor

- ✓ US market leader for hydroxy trace minerals, marketed under the global brand IntelliBond®.



WHAT WE DO

Everything we do is **driven by passion** and **backed by science**.

Our innovative approach integrates **nutrition**, **animal health** and **farm management** in order to maximize performance and **help our customers prosper** in today's rapidly changing world.



Behind the word TROUW...

Pronounced:
[trau]



Meaning **LOYAL**

... 8.300 trustworthy employees



Caring



Who share the same **values**, **passion** and **dedication** for their work

Innovative



Capable



Collaborative



Compliance with legislation

Lifelong Animal Health



Confidence in Feed Safety

Optimum Feed Efficiency

Animal Productivity



... and whose
**Priorities are your
Challenges**



Farm Operation Profitability

Sustainable use of resources

Work life/balance



Reputation and Consumers' Perception

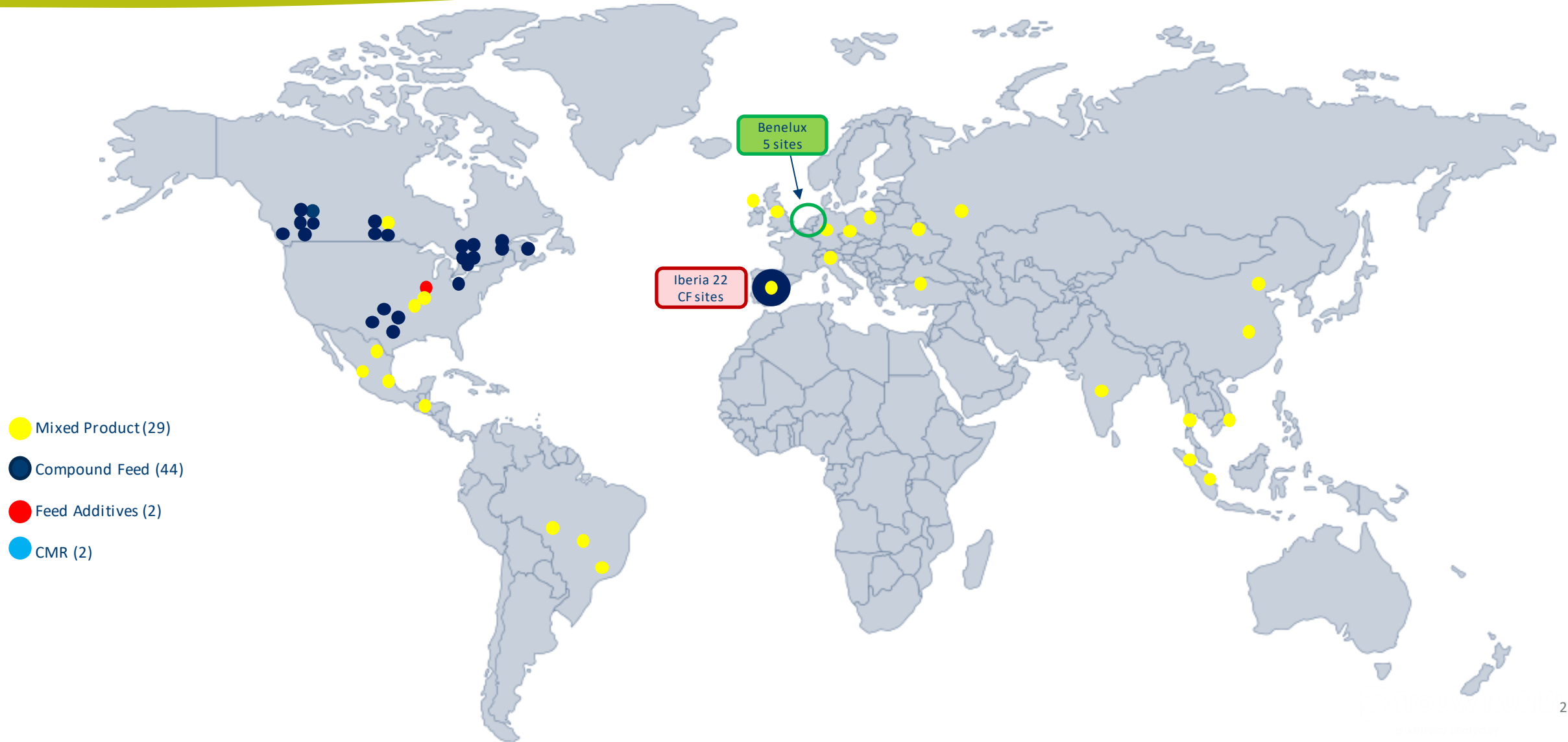
We are a **reliable partner**,
wherever **you** are.

Our Operations: Facts & Figures



Trouw Nutrition is present in **more than 175** locations, with other facilities such as farming, warehouses, hatcheries, offices, etc and **does business in 105 countries**.

Our Operations: World map



Our Operations: Zoom in EU (II)



- Mixed Products (1)
- Compound Feed (22)



**We don't just manage quality,
We take it to the next level.**

Nutrace added value



FOR CUSTOMERS AND VALUE-CHAIN PARTNERS

Nutrace® is Trouw Nutrition's company-wide proactive program to assure feed-to-food safety and quality.

Nutrace® safeguards the safety and quality of Trouw Nutrition products and services. Just as important, it improves operations, profitability and it reduces risks for its customers and their food chain partners.

Through Nutrace® we focus on all aspects of quality with added emphasis on feed-to-food safety, setting uncompromising standards from feed raw materials through to finished products and help minimize our customers' exposure to risks.

Nutraceutical Pillars



Certified Quality & Food Safety



Ingredient & Supplier Assessment & Management



Monitoring & Control



Risk Management



Tracking & Tracing

- Minimizing risk by stringent ingredient, manufacturer and supplier assessment and management;
- Ensuring only healthy, safe and sustainable raw materials are used for the production of Trouw Nutrition products;
- Total transparent operation for customer confidence;
- Assuring high quality products and services.



We don't just manage quality, we take it to the next level.



Certified Quality & Food Safety

- Commitment to international quality standards in all parts of the chain;
- Based on Hazard Analysis and Critical Control Point and Trouw Nutrition's own Health, Safety, Environment and Quality system;
- External certification (e.g. FeedAssure®, ISO, Good Manufacturing Processes (GMP+ Int) with third-party independent audit.



Risk Management

- Implemented risk management system to take appropriate precautions to minimize risks;
- Crisis manuals have been developed based on experience and simulations. These specify necessary corrective actions, communications and, where necessary, recall procedures. Well-trained crisis teams are prepared to minimize the impact of incidents;
- Supported by a comprehensive, global network throughout the industry, with regulators, NGO's and other stakeholders.



Tracking & Tracing

- Implemented Graphical Lot Tracker tracking & tracing-systems;
- Traces feed batches back to their raw materials allowing for rapid upstream and downstream information essential for an efficient recall program;
- Ensures an efficient information flow between Trouw Nutrition, its suppliers and customers;
- Keeping record of every input and process from feed ingredient purchasing to finished product delivery.



Ingredient & Supplier Assessment & Management

- Common standards for the assessment and management of ingredients suppliers and manufacturers;
- New suppliers and manufacturers must be evaluated and approved before being considered an official Trouw Nutrition supplier. Supported by Nutreco-wide ingredient & supplier assessment & management system;
- Only approved feed ingredients, suppliers and manufactures are used by Trouw Nutrition.



Monitoring & Control

- Implemented monitoring system;
- Harmonized sampling & analysis methods;
- Specific requirements of laboratories;
- Nutreco wide early warning and rapid alert system;
- Control of non-conformities;
- Clear procedures for internal measures and external notification.





> We offer **integrated solutions** harnessing our **uniquely broad portfolio**

Our Global Portfolio

LIFESTART
SETS LIFE PERFORMANCE

Scientific & Knowledge-based platforms

Early Life Nutrition Products

Feed Additives

Mixed Products

ChickCare
Unlocking flock productivity

milkiwean
TOTAL PIGLET PERFORMANCE
gestawean
PERFORMANCE STARTS AT CONCEPTION

SPRAYFO

Selko

maxcare

nutriopt
knowledge feeds success

Gut Health – Feed Safety – Nutritional Solutions

Poultry

Swine

Ruminants

Multi-species

+ Local Brands (Milkivit, Farm-O-San, ShurGain, Hi-Pro, etc)
+ Tailor made Mixed Products (#2 Premix producer worldwide)
+ Local Companion Animal brands

masterlab

> Innovation & Animal Life Sciences are in our
DNA

We help the feed-to-food actors **accelerate** how precision farming tools and strategies are invented, made and used to feed the future.



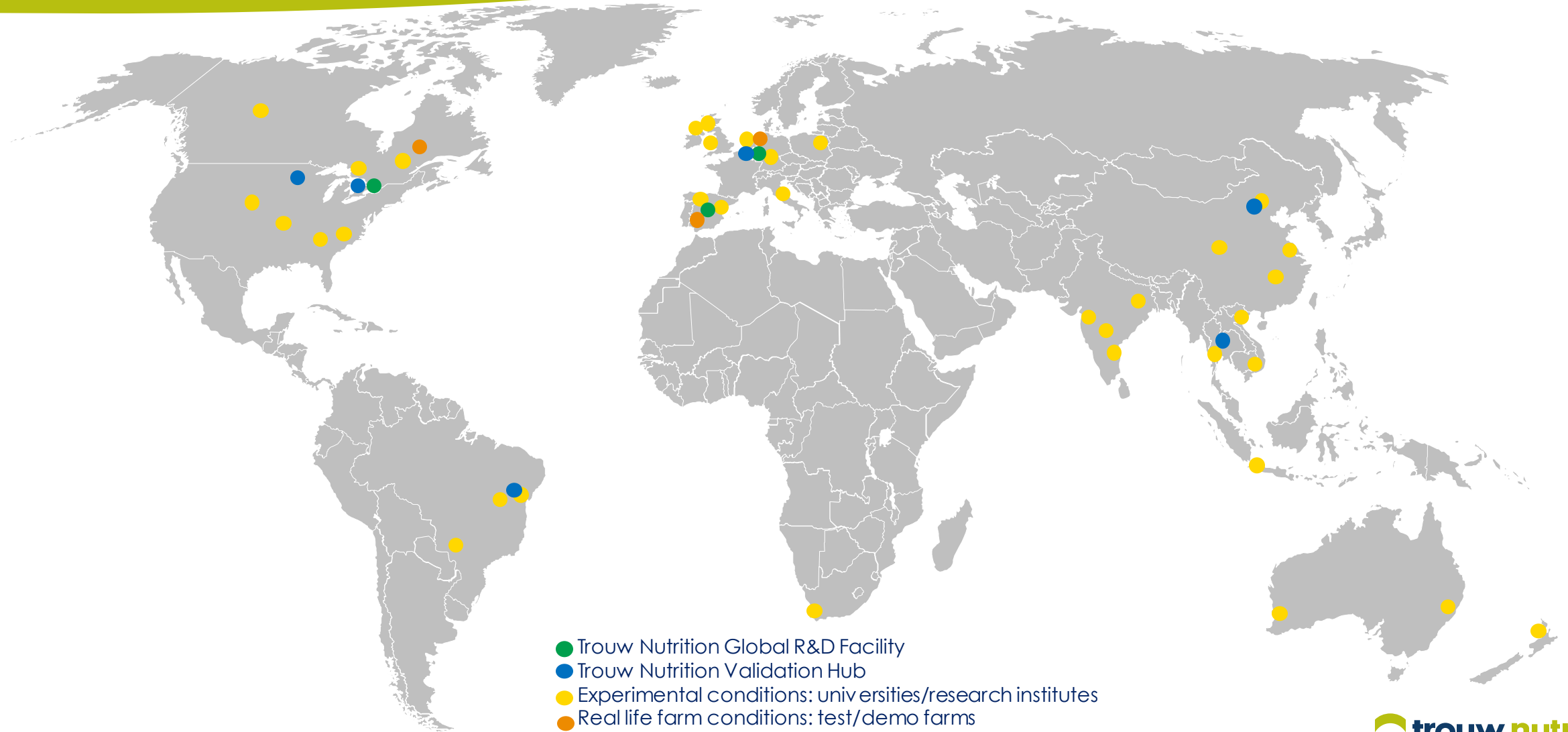


We resort to state-of-the art technologies,
... and possess the **most advanced knowledge** in-house



Our Research network:

100+ partners in 20 countries



What we mean by innovation-driven company

We invest to develop the innovations that will lead the way in the next 10 years



2018 R&D output

>70

Studies conducted at own research facilities (10 locations in 6 countries)
Presentations at >30 scientific conferences
>20 Publications in scientific journals



People & Places

135

R&D employees incl. 50 high-calibre researchers with international reach



Validation

80+

Validations trials conducted each year for a >5 €M budget
6 validation hubs



Collaborations

>100

collaborations with the top universities, research institutes and customers across the world



To fulfill our mission, we focus on 4 innovations pillars



Early Life Nutrition

The average productivity of farmed animals worldwide is 30-40% below their genetic potential because of low investment in young animals, suboptimal farming conditions that negatively impact on an animal's health status



Our Ambition

Maximising the genetic potential of production animals by investing in the young animal and pre-parturition period.

Our Science

LIFE START

SETS LIFE PERFORMANCE

Trouw Nutrition's scientific platform has demonstrated that investing in the early life timeframe of the animal- incl. pre-parturition period :

- has profound and long-lasting effects on the animal's potential and life-long performance
- promotes sustainable farming
- helps to achieve the highest farm financial results possible

Our Latest Commercial Innovation



April 2018



The latest formulation based on science

Benefits to the calf

- Increased metabolizable energy during the critical window of opportunity
- Lower osmolality and balanced mineral composition to meet calf's requirements

Benefits to the dairy farmer

- More saleable milk to the processor
- Peace of mind that every calf is receiving the best LifeStart

www.sprayfo.com/ECM

Our Science

LIFE START

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Our Latest Commercial Innovation



Gestawean Oxiliv



- A reduction of stillbirth
- Depending on farm conditions, a reduced need for manual interventions during the farrowing process
- A higher colostrum intake
- A lower pre-weaning mortality

Our Science

LIFE START

SETS LIFE PERFORMANCE

Trouw Nutrition's scientific platform has demonstrated that investing in the early life timeframe of the animal- incl. pre-parturition period :

- has profound and long-lasting effects on the **animal's potential and life-long performance**
- promotes **sustainable farming**
- helps to achieve the **highest farm financial results possible**

Our Latest Commercial Innovation

ChickCare
Unlocking flock productivity



ChickCare 0-4 days is an antibiotic-free specialty which targets the first four days after hatching. Key benefits:

- Robust chicks
- Supports early life health
- Helps to enhance performance throughout life
- Shortens productive cycles
- Improves final body weight, carcass weight and meat
- Improves yield results
- Increases profitability per bird

Healthy Life

Several European countries have restricted or banned the use of antibiotics as growth promoters because of the risks of drug resistance in Human following exposure to small doses of antibiotics in animal products. Today close to 1 million people die due to antibiotic resistance.

By 2050 it will be the main cause of death.



Our Ambition

Empowering our customers to **efficiently reduce reliance on non-sustainable solutions** such as antimicrobials, thanks to an integrated approach that ensures profitability, animal health & welfare, while preserving environmental and public health.

Our integrated approach



Feed management

- Feed hygiene
- Feed formulation



Farm management

- Management around animals
- Biosecurity and hygiene management



Health management

- Functional additives to reduce the reliance on antibiotics



[Click here for video](#)

Precision Farming

When every decision impacts your animal and business performance, you want to build on more than intuition alone.

Farmers are facing the difficult challenge of reconciling resources management, animal health & welfare, reduced ecological footprint, output quality with animal performance and sustainable income. For example, feed costs alone already account for as much as 70%.



Our Ambition

Harnessing the power of digital tools and big data to sustainably improve feeding and farming practices, enhance animal health, and meet production objectives. Minimizing impact on the environment while making animal husbandry more efficient, predictable and rewarding.

Our Digital Platform

nutriopt

knowledge feeds success

NutriOpt is Trouw Nutrition's innovative, digital platform. It delivers integrated solutions to support sustainable precision farming for optimal animal performance and business success.

NutriOpt encompasses:

- QA/QC reports (Raw materials data)
- Nutritional insights
- Least cost formulation
- Output formulation (feeding programmes)
- System optimization

Our Latest Commercial Innovation

The NutriOpt On-site Adviser

Better feed choices today

Accurate ingredient analyses - instant results reporting to smartphone, without samples leaving the site - quality assurance - insights in your feedstuffs and nutritional recommendations for better-informed decisions in day-to-day use of feedstuffs.



<https://www.trouwnutrition.com/en/nutriopt/on-site-adviser/>

Feed Safety & Quality

Contaminated raw materials and feed represent an important route of transfer of feed hazards to the food chain, with potential impact on public health.

The increasing global trade and use of co-products towards a more circular, sustainable economy, has further reinforced the focus in guaranteeing high quality and safety standards in animal feed production, supporting health, performance and well being of animals.



Our Ambition

Feed Safety as a pre-requisite for safe, sustainable food production by delivering advanced diagnostics and technological solutions focused on improving the safety and sustainability of the feed supply chain, the health and well being of animals

Our Feed Safety Programme

Sustainable feed production by maintaining the nutritive value of raw materials, co-products and feed

Prevent Salmonella contamination in the feed chain

Reduce mycotoxin prevalence in feed

Improve feed mill efficiency and operation excellence

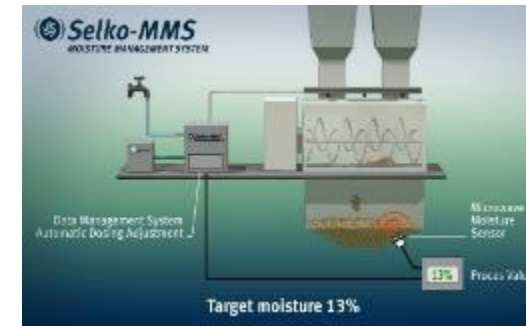
Our Latest Commercial Innovation



TN Global Mycotoxin database



Formaldehyde Alternative
Log 3 reduction of *Salmonella* in feed stuffs



In-line moisture management to improve feed quality

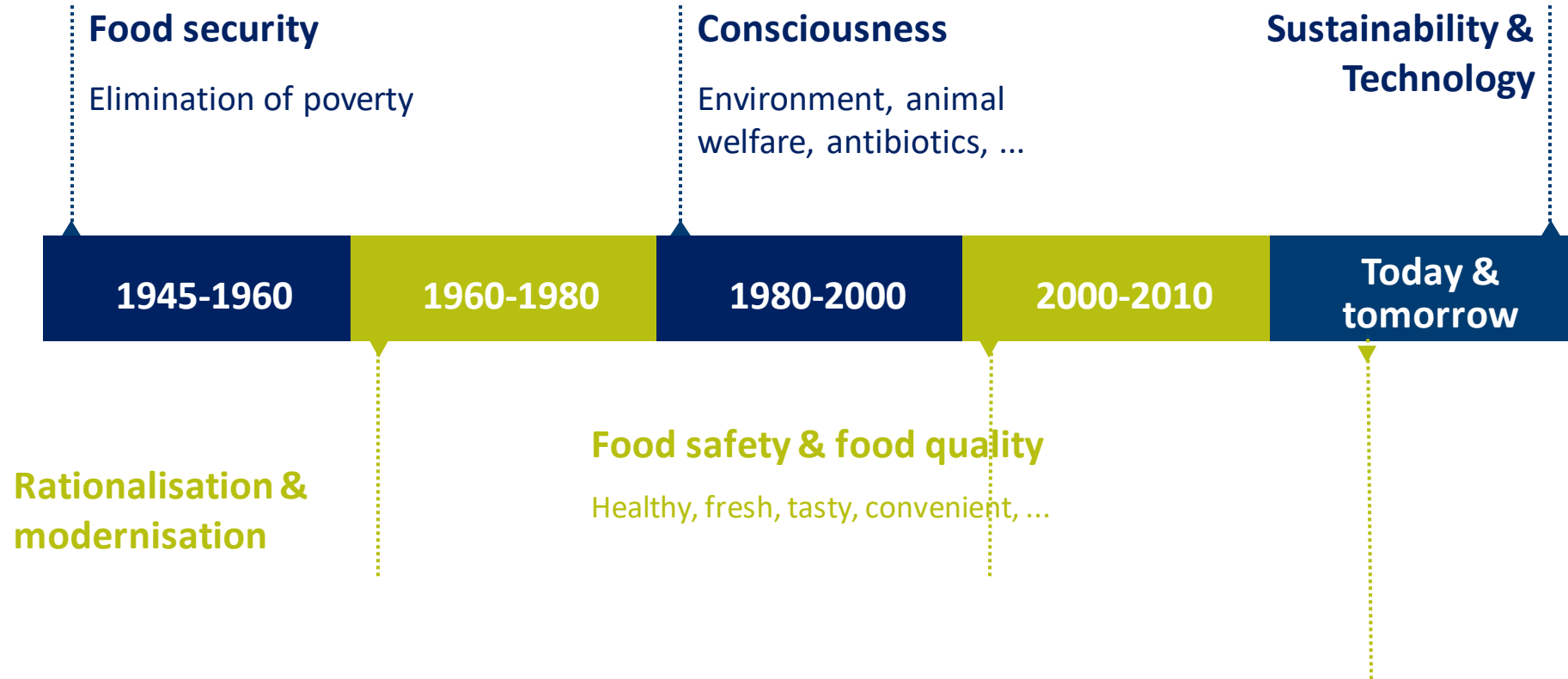
Nuterra

Holding ourselves accountable

Nuterra is Nutreco-wide sustainability programme. It is designed and managed by the Nutreco Sustainability Platform (NSP) and implemented by our operating companies in our two divisions.

Sustainability: a part of our business model

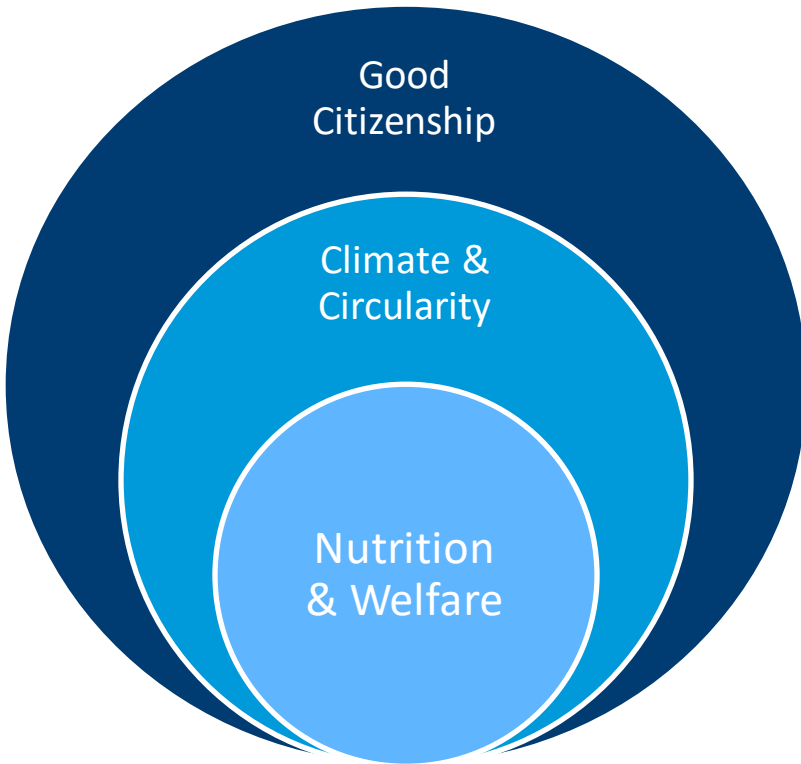
Evolution of food production & consumption



> 2020: Introducing a new RoadMap towards 2025

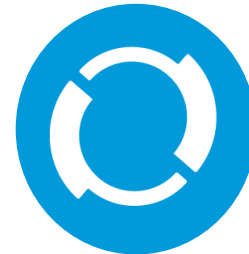
RoadMap 2025 Pillars

Clear ambitions regarding people, planet and prosperity in our three core impact areas



Health & Welfare

- Animal Health
- Antimicrobial Resistance
- Animal Welfare**



Climate & Circularity

- Climate change
- Natural Resources
- Biodiversity & Ecosystems
- Innovation
- Energy
- Waste
- Packaging
- Water**



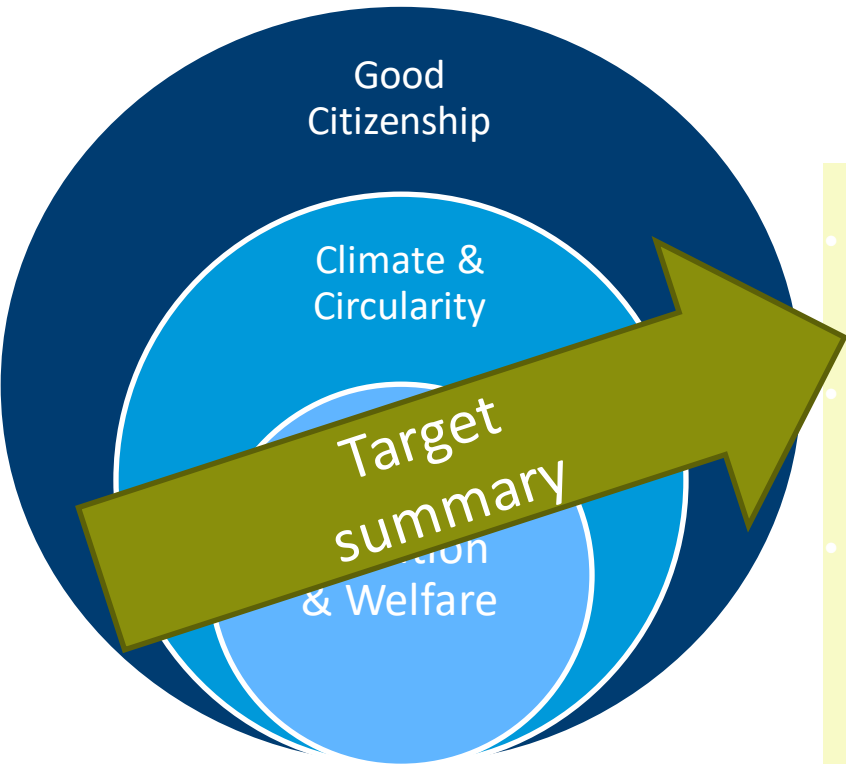
Good Citizenship

- Community Projects
- Labour & Human Rights
- Diversity and Equal Opportunity
- Employee Development**
- Occupational Health & Safety*
- Local Communities*
- Stakeholder Partnerships*

Topics in grey are addressed through other departments or only when relevant*

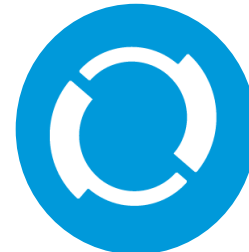
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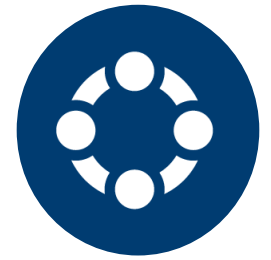
Health & Welfare

- No prophylactic use of antibiotics in feed
- No use of antibiotics/ coccidiostat for growth
- No use of listed “critically important for human health” antibiotics



Climate & Circularity

- Science Based Targets towards 2030
- LCA + sustainability filter in innovation
- 100% deforestation-free
- 100% of marine ingredients are certified
- 5 - 10% ingredients are novel*
- 100% recycled, reusable or compostable packaging
- 0% coal and oil by 2030
- 0% waste to landfill



Good Citizenship

- 12,000 farmers educated
- Ratings + audits of high-risk suppliers
- 25% women in senior management

Nuterra Standard



nuterra™

Our Nuterra Standard is an internal tool that clearly outlines the actions needed to realise the Nuterra Roadmap and enables us to **measure and score** progress over time.

Our operations undertake an **annual assessment** to ensure that we hold ourselves accountable in our sustainability aspirations and targets. This tool also allows managers insight where to focus their sustainability activities for the coming period.

The outcomes of these assessments are documented in **Nuterra scorecards** per operating unit.

Aligned with UN Sustainable Development Goals

Nuterra Roadmap 2025 is aligned with the UN Sustainable Development Goals (SDGs)



SUSTAINABLE DEVELOPMENT GOALS



SUSTAINABILITY REPORT 2019

Join us on our continuing journey

Open report



THANK YOU

Appendix

Through Nutreco NuFrontiers, Trouw Nutrition partners with German startup fodjan on their digital feeding management solution

- fodjan develops smart livestock feeding for farmers through an app that enables multi-parameter ration optimization linked to input and output data
- Farmer benefits are lower feed costs, improved animal health and lower dependency on advice
- App in development to integrate with Trouw Nutrition's NutriOpt platform, with initial focus on dairy

