

Introduction



At Nutreco, we are committed to delivering sustainable products and services, something that begins with sustainable sourcing, and we are focused on achieving the best results towards animal health and farm productivity.

This is part of our overall commitment to good citizenship towards all our stakeholders, especially our employees, the communities where we operate, and the developing world.

Since 2012, we have been working towards our Vision 2020 sustainability strategy. Now that we are reaching its conclusion, it is time to look to the future and ensure our sustainability ambitions remain aligned with our overall Nutreco strategy and ambitions. To prepare for this moment, we began a six-step process back in 2018, focused on resetting and realigning our sustainability priorities to once more establish our “true north.”

Completing the development of the strategy and KPIs, which includes setting the dot on the horizon of where Nutreco should be by 2025 was the first phase in embedding and achieving our RoadMap 2025. In the second phase, the sustainability department will partner with the Corporate Communications and Corporate Development departments to develop a narrative on sustainability including an ambition statement. The third and final phase will include corporate sustainability governance reform, in which the Corporate Sustainability department will partner with the divisions and

division-level functional directors who will own the various aspects of RoadMap 2025. These functional directors will then partner with the Operating Company (OpCo) managing directors around the world to implement and execute RoadMap 2025.

After the NELT approved RoadMap 2025, the Corporate Sustainability and Corporate Communications teams partnered to roll it out across Nutreco. We developed a series of webinars, Nutranet videos, workshops, presentations and train-the-trainer PowerPoint toolkits with Sustainability Champions to introduce the RoadMap to OpCo management teams, as well as this RoadMap 2025 document. The divisions will follow up to support that functional departments and OpCos fully understand the scope of RoadMap 2025 and what will be expected from them.

This strategy outlined on the following pages sets the tone for developments and changes to happen in Nutreco’s sustainability activities over the next five years. At every step of the process, we consulted with stakeholders to make sure we take their needs and concerns into account. You can learn more about our process under “Strategy development process” and our consultation with stakeholders under “Materiality.”

Through this process, we determined that we have three main themes of concern, under which all of our sustainability ambitions fall: (1) Climate and circularity, (2) Nutrition and welfare and (3) Good citizenship. This document will detail each of the main themes of concern and the topics that fall underneath them, framing the issues and presenting our recommended approach for each one. We refer to measurable targets, whenever possible, to help us report on progress in the years to come.



Three sustainability pillars

The role of the OpCos



The Nutreco Management Board gave very clear guidance to the Nutreco Sustainability Platform (NSP) that we should focus on three main areas identified within the Nutreco Materiality Assessment:- Anti-microbial resistance (AMR), greenhouse gas (GHG) emission reductions, and diversity & inclusion.

The NSP categorized the three over-arching themes related to these main focus areas as Health & Welfare, Climate & Circularity and Good Citizenship, with the NELT recommendation as the sub-headings where we would place the most focus. The NSP then identified the issues that need to be addressed to achieve these sub-headings. Our strategic ambitions falling under these three pillars are summarized in the dashboard below.

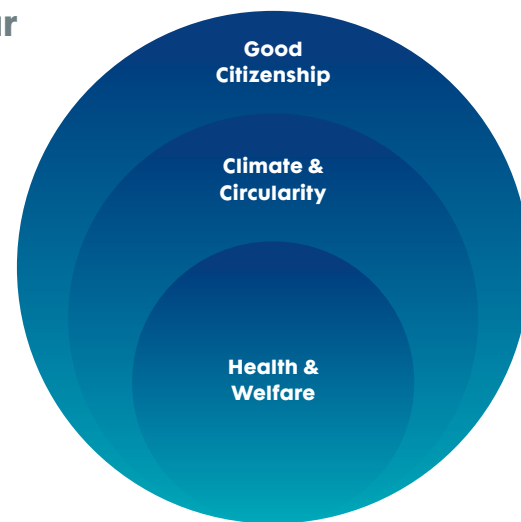


Table 1: Main topics covered in RoadMap 2025

Theme	Health & Welfare	Climate & Circularity	Good citizenship
Focus	Anti-microbial resistance	Greenhouse Gas (GHG) emission reductions	Diversity & Inclusion
We do this by...	Innovating new products and services that will directly reduce dependency on antibiotic usage in animal husbandry and adopting four-step targets that will significantly reduce antibiotic usage by creating business opportunities for clients.	Adopting Science-Based Target methodology setting emission reduction targets by energy efficiency programs and sustainable sourcing of ingredients incorporating life-cycle assessment methodology and utilization of novel ingredients . Addressing responsible use of natural resources, biodiversity and ecosystems in compound feed ingredients.	Addressing diversity and inclusion in staff. In addition, empowering local communities to raise themselves out of extreme poverty by farming sustainably with best practices technology to purpose.
Aspirations	Animal welfare	Packaging/ Water/Waste	Stakeholder engagement
Addressed by other departments			Employee development/ Occupational health and safety/ Human and labour rights/ Product Safety through Nutrace.

■ Mandatory topics ■ Aspirations ■ Topics handled by other departments

We will work with the divisions to deliver on the new sustainability targets, outlined in this document, prior to 2025, when strategically possible. Nutreco acknowledges that the each OpCo faces a different situation, for example, in terms of external pressures, available resources and necessary internal or external commitments.

To encourage cross-OpCo collaboration and best-practice sharing, we will enhance our network of Nuterra Champions. Each individual OpCo and/or its respective Nuterra Champion will be encouraged to form a community through the Yammar digital platform. This community platform will enable the team to share ideas about what has worked or not worked at the OpCos on issues that will support the achievement of the RoadMap 2025 targets. It is recognized as a very viable and relevant process to motivate our people around the world to unite around a common goal.

We will document the progress we make in the annual Nuterra Progress Assessment (standard), which is designed as a multiple choice questionnaire that, once completed, will give a percentile score to be recorded and published in Nutreco's annual Sustainability Reports.

As part of our strategy towards 2025, the NSP will collaborate with divisional functional directors to offer support and create more opportunity for exchanges and cooperation with the OpCos. This will also help create more opportunity for communication at global as well as OpCo level.



To assist the OpCos in managing their progress on RoadMap 2025 over the next five years, the NSP has developed the Nuterra Progress Assessment standard that each OpCo will complete annually. This Standard contains questions related to the criteria and targets in RoadMap 2025 and a multiple choice dropdown window. Completing the Progress Assessment Standard results in a percentile score of partial completion. This tool results in two benefits for the OpCo: (1) It scores and informs the OpCo management team on where they are in terms of completing our objectives by December 2025; and (2) It is an effective tool to help OpCo management identify where to focus efforts and resources in sustainability activities for the following year to increase their scores. While completing the Progress Assessment requires multiple inputs from procurement, sales and administrative teams, among others, OpCo managing directors are responsible for "orchestrating" and submitting the responses to the NSP every fourth quarter (2020-2025).



For all the material topics that give us an opportunity to distinguish Nutreco and provide us with our license to operate, we have developed a Nutreco approach and objectives, and, where possible, measurable targets. You can find some of our main targets in the dashboard below, organized under our three pillars. Read on for detailed information about each topic, our current situation and our proposed approach going forward.

Health and welfare	Climate and circularity	Good citizenship
Engage with governments to promote regulatory reform	Science Based Targets towards 2030	Expand community development and community engagement initiatives to touch the lives of 12,000 people
No use of antibiotics for growth promotion	LCA + sustainability filter in innovation	Ratings + audits of high-risk suppliers
No use of antibiotics categorized as critically important for Human Health***	100% deforestation-free	30% women in senior management
No preventive** usage of antibiotics	100% of marine ingredients are certified or come from a Fishery Improvement Project (FIP)	
	5 - 10% ingredients are novel*	
	100% recycled, reusable or compostable packaging	
	0% coal and oil by 2030	
	0% waste to landfill	

* Novel ingredients are non-conventional feed ingredients or those that need further development before being utilized as alternatives for conventional ingredients traditionally used by feed manufacturers. We consider novel ingredients those that have been introduced to our formulations after 2015.
 ** Ensure no preventive usage of antibiotics in our products and services. Any order of medicated premix/feed should be accompanied with a valid prescription from an authorized professional.
 *** as published in "Critically important antimicrobials for human medicine : 6th revision", <https://www.who.int/publications/i/item/9789241515528>

Health and welfare are at the core of everything we do as a company and are areas where we can make a big difference, in partnership with our customers. Helping to make sure that animals are raised with optimal nutrition and good welfare is essential for Feeding the Future and can even have a significant impact on human health.



Antimicrobial resistance (Use of antibiotics)

Framing the issue

If no action is taken - warns the UN Ad hoc Interagency Coordinating Group on Antimicrobial Resistance – drug-resistant diseases could cause 10 million deaths each year by 2050 and damage to the economy as catastrophic as the 2008-2009 global financial crisis. By 2030, antimicrobial resistance could force up to 24 million people into extreme poverty. Nutreco has never before had a comprehensive and strategic policy on antimicrobial resistance (AMR). Most of our past activity around this human health challenge was in raising awareness and making "calls to action" at public speaking events and pre-competitive platforms (e.g., our previous CEO addressing a side event at the United Nations).

Looking towards 2025, this is clearly an area we need to address. Since 80% of antibiotic usage takes place in the livestock production sector, we have a significant role to play, and we have agreed to step up and assume responsibility for

our position in the value chain. At Nutreco, we offer nutritional solutions with our feed additives that allow protein farmers to reduce their dependency on antibiotic use. Over the last five years, we have had multiple experiences with strategic clients that have proven that a holistic approach, including husbandry best practices and feed and water additives, can successfully reduce antibiotic usage and result in protein products "never-ever" being exposed to antibiotics. The technology currently exists to make this possible, and during the next five years, Nutreco will employ its expertise to address this major challenge to future generations.

Our approach

Nutreco's AMR policy will centre around a four-step approach. Nutreco, our divisions and our affiliated OpCos will engage and demonstrate our level of commitment in the following four categories:

- No use of antibiotics categorized by WHO*** as "Critically Important for Human Health" (CIA) in our products and services
- No use of antibiotics for growth promotion in our products and services.
- No preventive** usage of antibiotics in our products and services.
- Engage with governments to promote regulatory reform.

In addition to these four categories of action, our Nutreco divisions will offer their services to deploy expert teams to strategic OpCo clients that are targeted as "never ever" protein product producers in an effort to convert our sustainability policy into a business opportunity and simultaneously influence change within the value chain.

Pillar two: Climate and circularity



People worldwide are becoming more aware of the environmental impacts of food production and their own dietary choices. According to the UN's Food and Agriculture Organization, global feed production represents 45% of the carbon footprint of livestock products.

At Nutreco, the most significant part of our environmental impact is in the supply-side of our business model and activities; by working together with partners at every stage of the value chain we can reduce our environmental impact.



Climate and footprinting

Framing the issue

Understanding our impact is an essential part of reducing our carbon footprint, as it enables us to track performance against our targets. Carbon footprinting is a fundamental part of building a robust and science-based environmental strategy.

Nutreco has reported the carbon footprint of its operations since 2009. In our Vision 2020, we made a bold commitment to halve the footprint of our operations by 2020, looking at carbon credits to help achieve this ambition. Looking to 2025, Nutreco is committed to leading with a true commitment to reducing its carbon emission footprint, including significant reductions in our energy usage and the footprint of our procurement activities. We will also be monitoring our impact downstream at the farm through life-cycle assessments (LCAs). This will enable us to measure our environmental impacts at the farm.

Our approach

As of 2020, Nutreco will implement LCA tools and analysis capacity within each division, with common methodology and communication approaches aligned across the company. This effort will lead to systematic footprinting of our products and formulations, while beginning a gradual implementation of comparative footprints of farm scenarios once validation is complete for new and existing products and services, and an integration of footprints within procurement requirements.

In addition, Nutreco commits to the Science Based Target (SBT) initiative, to align with the 2015 Paris Agreement and ensure that we set meaningful goals that are in line with the latest in climate change science and will prepare us to get ready for a lower-carbon future. We are targeting a before and after well below 2 degree C" level for Scope 1 & 2 and 3 but want to stay aligned with updated SBT recommendations and requirements over the coming years. Scope 1 & 2 are those emissions that we directly create through our operations and/or are created through the energy we purchase. We'll reduce this by focusing on, 1) absolute reduction in energy consumption with energy efficiency initiatives, 2) adopting renewable energy use where possible, 3) engaging in Power Purchase Agreements (PPA), 4) purchasing green electricity, and 5) purchase offset credits as final phase.

For Scope 3 a 58% emission reduction (economic value-added) for 67% of Scope 3 (38.9% corrected). These emissions are those created indirectly through our purchase and usage of external services. These are dominated by the impact of commodity crop production and land use change. To meet our Scope 3 targets, we will continue working on deforestation-free sourcing, utilize LCA methodology, developing and incorporating novel ingredients and cooperating with stakeholders to reduce the footprint of commodities.

All emission reductions compared to a 2018 baseline year.

Nutreco will also start measuring its air transportation and logistics footprint, to develop a reduction plan.

In summary, we will:

1. Do what it takes to reach our Science-Based Targets commitment in 2030.
2. Implement LCA metrics in feed formulations, in the innovation stage-gate process, and in procurement (as part of Scope 3 for Science-Based Targets).
3. Develop footprinting capacity in our farm and formulation models to help customers measure and reduce their emissions.
4. Achieve third party verification of core LCA tools in place.
5. Connect LCA metrics to internal data systems for automated product and corporate footprint calculations.



Natural resources

Framing the issue

To meet the demands of a surging population and middle class, as an industry we will need to increase global food production towards 2050 by at least 50% of current levels. Some NGOs have signalled that we are already consuming the equivalent of 1.5 planet Earth's worth of natural resources. Clearly we need to find ways to do more with less.

In this context, Nutreco embraces its responsibility within the food value chain to ensure responsible use of natural resources, including the potential to sequester carbon, promote biodiversity, conserve forests and ensure healthy oceans.

The need to preserve and use natural resources efficiently is complex and often involves many companies being willing to engage, long-term, to mitigate damage and ensure sustainable development. In the past, Nutreco has been a proactive participant in multi-stakeholder and/or pre-competitive platforms that involve the industry to search collaboratively, to resolve the environmental impacts of producing or extracting of commodities, minerals and other ingredients in our processes.



Ecosystems and biodiversity

Framing the issue

Biodiversity is fundamental to sustaining life and supplying critical ecosystem services such as food provisioning, water purification, flood and drought control, nutrient cycling, and climate regulation. These services are also essential to support human well-being and economic growth. Yet despite the significant economic, social and cultural values of biodiversity and ecosystem services, biodiversity worldwide is being lost – in some areas at an accelerating rate.

To go into a bit more detail, ecosystem services can be grouped into four categories: provisioning (i.e., production of food and water), regulating (e.g., providing flood control), cultural (e.g., for recreation) and supportive (e.g., nutrient cycles and oxygen production). Healthy ecosystems and a rich biodiversity are vital for society to function properly because they not only provide society with food and clean water, they also play an important role in our quality of life.

Nutreco currently addresses biodiversity and ecosystems in the Marine and Agricultural Supplement to our Supplier Code of Conduct. We have clear requirements related to responsibly managed fisheries, we do not tolerate illegal deforestation and we set requirements related to responsible agricultural practices.

Our approach

At Nutreco, we realize that certification is not the only tool to ensure responsible use of natural resources. However, where independent certification is an option and available, it can be an effective tool to verify conformity to its principles where information is otherwise difficult to track and trace.

Pillar two: Climate and circularity



By 2025, Nutreco will:

1. Source 100% of marine ingredients from sources audited and certified by the Marin Trust or MSC.
2. Ensure that where Marin Trust or MSC certified marine ingredients are not available, all non-certified ingredients will be engaged in a Fishery Improvement Project (FIP). That FIP will publicly report developments annually.
3. Ensure that all marine ingredients produced from species caught for the sole purpose of producing a feed ingredient will, as of 2022, come from certified sources of whole fish or from fisheries that participate in a recognized program to improve in order to become certified.
4. Conduct an analysis to understand the risks of deforestation and conversion in our supply chain, focusing on our highest-volume plant ingredients and ingredients known to have global risks (i.e., soy and palm oil).

Based on this analysis, Nutreco will:

- a. Make a public commitment to transition to a deforestation- and conversion-free supply chain in our sourcing of plant ingredients.
 - b. Develop an action plan, timelines and milestones to achieve the deforestation- and conversion-free sourcing commitment that includes soy and palm oil among its initial priorities. For each prioritised raw material within the commitment, Nutreco will specify time-bound, quantitative and geographically-specific targets and milestones that can be objectively assessed.
 - c. In geographies most impacted by biodiversity lost due to land conversion, source 100% of agricultural row crop commodities (soy, palm oil, wheat, maize, etc.) from land conversion-free sources such as RTRS, Proterra, Cerrado Conservation Mechanism (CCM) or other established mechanisms that have broad and multiple stakeholder acceptance.
5. Participate in at least one multi-stakeholder platform that assists us in advancing our no-conversion commitment.
 6. Ensure that by 2022, all agricultural vegetable products are traced back to the country where they were cultivated, to

use in a risk filter and for footprinting requirements.

7. Engage and promote industry workshops to encourage and support livestock intensification with best practices and nutritional solutions over pasture to reduce deforestation drivers and optimize carbon sequestration while encouraging increases in production to satisfy demand.

Our OpCos will ensure that:

1. 100% of office stationery, marketing materials and business cards use paper certified by the Forest Stewardship Council (FSC) label when available.
2. 100% of wooden pallets are FSC-certified or equivalent when available.



Novel Ingredients

Framing the issue

Innovation will be critical for our industry to feed the 9.7 billion people estimated to populate the Earth by 2050. The challenge is so big that succeeding at our mission of Feeding the Future will require us to look at it from every possible angle to find new – even revolutionary – methods of producing more with less.

Thankfully, innovation has long been at the core of everything Nutreco does. Our innovation and R&D activities are driven by the belief that we must bring knowledge and technology to the market, faster and more effectively. And not only in markets in developed industrialised countries, but also in developing countries. We do this by translating world-class research and innovation into practical, sustainable nutritional solutions.

Nutreco spends over 15% of its operational profit on R&D and innovation. We have 11 research centres. In animal nutrition, Trouw Nutrition Research Centres are based in the Netherlands, Spain and Canada. In aquafeed, Skretting ARC is based in Norway, with other units in Italy, Spain, Egypt, Equador, Chile, Japan and China.

To further validate and test our research results in practice,

Nutreco has field research farms in many key markets. Since collaboration and partnerships are a prerequisite for speeding up the overall innovation development cycle, Nutreco has over 60 partnerships with universities and research institutes worldwide.

Our approach

Nutreco will seek to develop nutritional solutions that enable our customers to produce more with less and first-class innovations that reduce the environmental impact of our own activity or the activity and products of our customers.

When new nutritional solutions are evaluated internally and introduced to the market, we will conduct LCAs to identify the most significant environmental impacts of the solutions. Internal systems to achieve this will be in place from 2021, and external information from 2022.

Nutreco will ensure that by 2025:

1. **5-10% of feed ingredients come from alternative novel sources, defined as:**
 - Unconventional feed ingredients from plant, animal and inorganic origins (not traditionally used by feed manufacturers), where after extensive R&D work and volume scale up, can be used as suitable alternatives for conventional ingredients in commercially relevant quantities.
2. The innovation stage gate process includes a sustainability filter (qualitative and quantitative) to ensure no environmental impact trade-offs and encourage the most significant environmental impact.
3. For its overall R&D efforts, Nutreco invests a minimum of €30 million in innovation per year.
4. We are active in utilising mechanisms to stabilise food and feed processing by-products to be able to further incorporate into animal nutrition solutions that will highlight circularity.



Energy

Framing the issue

Global energy demand continues to intensify and is expected to grow 30% by 2035. At the same time, society and industry all want a lower carbon energy mix. Nutreco has an opportunity to balance the use of secure and affordable domestic energy resources by accelerating the transition towards lower carbon technology.

Our approach

In our policies around energy use, Nutreco is adapting to some of the biggest challenges of the 21st century, from rising demand and energy security, carbon footprint reduction, sustainability and climate change. Promoting smarter use of technology, unlocking efficiency, and developing and diversifying our related skills for the future are just a few of the ways that Nutreco (supported and led by the company's Sustainability and Global Operations departments) is evolving to address these challenges.

Nutreco will commit to:

1. Exploring options to reduce our carbon footprint linked with fuel and coal
2. Exploring different mechanisms to be supplied with “renewable energy” or promote renewable sources by, for example, signing contractual agreements to buy energy generated by a renewable asset (Power Purchase Agreement - PPA)
3. Prioritizing energy suppliers with SHV-Energy affiliates where geography overlaps. Prioritizing sources like bio-liquefied petroleum gas (LPG) and GNL when available.
4. Exploring the implementation of alternative energy supplies for new projects or investments, prioritizing renewable sources like solar panels, biodiesel, bio- LPG, etc.

Pillar three: Good citizenship



As a responsible company, we want to be a good citizen and have a positive impact on our main stakeholder groups. This includes doing business with respect for the rights of everyone impacted by Nutreco.

It means providing a working environment where our employees feel safe, welcome and able to develop in their careers. And it involves working together in our communities towards a better way of life for everyone.



Diversity and inclusion

Framing the issue

Today's global challenges make it more important than ever that we have a workforce with diverse ideas, backgrounds and viewpoints to help us approach issues from every possible angle. Employees today are seeking a workplace where they feel valued and included.

Nutreco operates in and with highly diverse groups in terms of gender, culture, ethnicity, nationality and ways of thinking. We are committed to ensuring this is reflected in the diversity of our people and to building an inclusive culture where all people are respected, engaged and given opportunities for personal and professional development.

We believe that an engaged workforce leads to a positive and productive work environment, contributing to improved business results. We will, therefore, regularly measure our people's engagement and act on areas for improvement.

Our approach

Though this topic will be led by the HR department, Nutreco believes it is a core value of being sustainable and socially responsible. We will amplify the efforts made by HR to ensure wide adoption. Nutreco will continue developing and implementing actions to ensure we can attract and retain a diverse workforce, while creating awareness and enabling a more diverse leadership team.

Nutreco will ensure:

1. One out of three hires is female (starting in 2020)
2. We target having 30% women in senior leadership by 2025
3. We implement the "taking the stage" programme, beginning in 2020, to help facilitate this transition



Community development (Nigeria and Guatemala)

Framing the issue

Poverty and food security will be a continuing problem as our global population increases to an estimated 9.7 billion by 2050. This poses a big threat to our communities and to society in general – not only from a sustainability perspective but also from one of social imbalance.

Nutreco businesses are an important part of the local communities where we operate. We contribute to local economies by providing workplaces for community members and sourcing local services and goods. We also have a role to play in maintaining nature's ability to function over time by minimizing waste, preventing pollution, promoting efficiency and developing local resources to revitalize local economies.

To address these issues in the markets where we operate, Nutreco has been involved in Community Development Projects around the world since 2014. These projects are based on "creating shared value" and are strategically targeted to empower and train people in the economically marginalized communities where our OpCos function. Their aim is to raise awareness, transfer technology to increase farm production sustainably and assist people in these marginalized communities to "raise themselves out of poverty."

By focusing on creating shared value and avoiding classical philanthropic engagement, Nutreco believes that there is a higher chance of success and sustained growth. We committed to continuing these projects over the long term. We will extend these efforts to include all economies where we operate, and scale the number of lives touched to the size of the company.

Our approach

We will continue to engage in geographies where Nutreco has OpCos, technical expertise and nutritional solutions that will support community development, using local partners from civil society to ensure we have the right support. We will employ external and internal communication tools to publicize the results, in an effort to encourage other private sector players to engage in similar projects.

Nutreco and its divisions will endeavour to promote community development by offering "seed financing" to initially launch projects, and then partner with other members to ensure the continued growth and development

of the projects. Nutreco recognizes that to be impactful in our communities we will need to cooperate with local partners that can assist in bringing small farmers together, organizational support to implement projects and international foundations for funding.

Nutreco, through the capacity and at the discretion of its OpCos, will also seek to develop the local communities we work in by sourcing local goods and services when they can be found at a satisfactory quality. In economically developing countries, we will seek to support industries that can supply us with raw materials, utilizing local resources to support economic growth.



By 2025, Nutreco will:

1. Expand community development and community engagement initiatives to touch the lives of 12,000 people in the communities where we operate. This can be through direct development with small farmers at or near economic poverty levels (e.g., earning less than €1.90 / day) that helps raise their incomes above poverty levels or direct engagement with local communities in projects that raise awareness of sustainability, educational initiatives and community improvements.
2. Develop a local supply of raw materials for production in areas where it does not yet exist (Africa and Asia).
3. Organize a local community day each year where Nutreco employees engage in projects to help the local community.



The Management Board and NSP agree that the three themes represented on Table 1 (Page 11) are mandatory, Nutreco-wide, RoadMap 2025 criteria.

To achieve our goals under those themes, we have identified eight relevant issues and set corresponding targets. The NELT advised the NSP to address the ten issues highlighted on Table 1 (page 11); recognizing that five are considered aspirational Targets and only mandatory for those divisions or OpCos where the issue is relevant to local strategy, geography, regional market and position in the value chain (e.g., animal welfare, sustainable packaging, waste, water and stakeholder engagement).



When and where relevant, Nutreco's divisions and OpCos will implement the sustainability strategy highlighted in this section, for example, in areas like sustainable packaging, waste, water management and animal welfare management. We will also continue to address a number of topics that are managed separately by different departments, such as employee development, local communities and safe and healthy working environments. All of our targets under these subcomponents are discussed in detail in this and the next section.



Animal welfare

Framing the issue

An animal experiences good welfare if it is healthy, comfortable, well nourished, safe, is not suffering from unpleasant states such as pain, fear and distress, and is able to express behaviours that are important for its physical and mental state.

Society is increasingly concerned about how animals are reared. Nutreco would like to make progress and align with our customers on our approach to antibiotics usage, animal handling, and product certifications.

Healthy animals deliver improved performance and improved welfare, including in areas such as parasites (e.g. sea lice), diseases, bacterial infections and nutritional deficiencies.

Our approach

Moving towards 2025, we will focus our communication on solutions, combining products and services, and highlighting best practices to promote healthy and productive animals, beginning with the Healthy Life platform for dairy in 2020. We will explore ways of reporting product attributes (e.g., advantages) in terms of animal health impacts, using standard measures (e.g., World Organisation for Animal Health (OIE) standard).

In addition, we will make sure to implement the following two concrete actions:

1. The Nutreco divisions will offer their services by deploying expert teams to strategic OpCo clients to address health and welfare (e.g., biosecurity, animal handlers, etc)
2. All Nutreco animal handling businesses must obtain local (most appropriate) independent animal welfare certification by 2025.



Packaging

Framing the issue

The packaging that helps protect and market our products has environmental impacts along the chain that stretches from the extraction of raw materials, through to product manufacturing, suppliers, retailers, consumers and beyond.

Our customers expect the products they purchase to be in perfect condition when they receive them. At Nutreco, we need to balance our aim to use packaging with the lowest possible environmental impact with our need to deliver quality products and present our brands well.

Our approach

Nutreco is committed to following best practices in packaging, by aligning its design and development with local waste processing capabilities while still providing product safety and shelf stability. We always aim to minimize any product or packaging waste to the environment.



To this end, we commit to having our Global Procurement and all OpCo procurement teams engage (1) their local

customer base (directly or in coordination with Sales) and waste handling associations to understand the outcome of the packaging waste produced and (2) their product packaging suppliers to explore ways of addressing Nutreco's plastic use, highlighting the incorporation of recyclable, reusable or compostable plastic in packaging. We will develop a Responsible Packaging Policy using this information.

An example that OpCos could follow are for the Sales teams to address packaging options (choice of packaging materials) and outcomes (what happens to these materials when packaging is disposed of) with their customers as part of their "excellence in sales" platform, reinforcing this behaviour through internal awareness building and workshops. The OpCos are encouraged to generate their own value proposition with their customers by facilitating workable solutions to collect and recycle Nutreco packaging.

Nutreco will commit to:

1. Ensuring that by 2025, all Nutreco packaging is 100% recyclable, reusable or compostable, to eliminate waste to the environment, and single-use plastic will be avoided when the local infrastructure permits an alternative. This is valid for both packed incoming goods (raw materials) and for the packed products Nutreco brings to the market.
2. Evolving and innovating our packaging (existing and new) to contribute to our commitment to reduce our carbon footprint by:
 - Using less material for each product (reducing packaging weight where possible)
 - Using more recycled and renewable materials in our packaging

¹ Using the World Wildlife Fund (WWF) Water Risk Filter and/or the Aqueduct Water Risk Atlas from the World Resource Institute (WRI).



Waste

Framing the issue

As we work to mitigate the impact of our businesses on climate change, waste is an area that is receiving more attention. Waste can increase the impact of the manufacturing process on climate change since producing and transporting goods that might be wasted as well as disposing of those goods to landfill or incineration all lead to greenhouse gas emissions.



Nutreco has been reporting its waste products from Operations since 2001. Looking to 2025, we are dedicated to leading with a true commitment to implementing Waste Prevention Programmes (WPP). These programmes should support the Opcos in decoupling economic growth from the environmental impacts of waste generation. With this in mind, mid-term and long-term targets may be useful. Reducing waste generation is a key preliminary aim, followed by targets for absolute reduction over the years.

Our approach

By 2025, Nutreco will:

1. Implement WPP with the main goal of reducing the amount of waste products we dispose of in landfills
2. Increase the amount of waste products we dispose of in recycling plants.
3. Define a clear goal of ZERO WASTE to landfill

4. Strengthen the re-use and the prevention, recycling and other recovery of waste.
5. By 2025, ensuring over 50% of waste is recycled, and we send less than 15% of non-hazardous waste to landfill.
6. By 2030, ensuring that more than 60% waste is recycled, and we send ZERO non-hazardous waste to landfill.

We will monitor progress and engage stakeholders throughout the development and implementation of prevention programmes, and monitor these programmes for their impact downstream through product LCAs.



Water

Framing the issue

The issue of sustainable water use has shifted from being a concern among a small group of experts to being a global priority. Today, it's widely understood that we must rethink the way we use and manage water to meet the needs of our growing population and to adapt to our changing climate.



Nutreco has been monitoring its water use for a number of years. The impact of water withdrawal on the environment, however, is entirely dependent on local conditions, including the availability and quality of the water, the dependency of the local ecosystem on the water, and risks around physical scarcity and contamination or degradation. These risks also translate into operating risks.

Our approach

1. Nutreco Sustainability team will monitor water stress indices for each OpCo location.
2. Locations with high stress (threshold to be determined) will implement Water Efficiency Programmes (WEP) to manage the risk.



Stakeholder engagement

Framing the issue

The challenges we face as a global community are too large for one company or organization to solve alone. That's why partnerships with others across our industry and society are so essential.



Nutreco has a history of participating in, and often leading, relevant stakeholder platforms that address complex, long-term issues that require industry leadership in collaboration with NGO involvement. We will continue to play our role in relevant multi-stakeholder and pre-competitive platforms to seek solutions in an inclusive way.

¹ Using the World Wildlife Fund (WWF) Water Risk Filter and/or the Aqueduct Water Risk Atlas from the World Resource Institute (WRI).

Our approach

Nutreco will continue to engage in external platforms that allow the broader industry to adopt changes to business practices that address specific environmental/social negative impacts.



We will continue to prioritize our engagement based, in part, on the following criteria:

1. Wide stakeholder involvement
2. Demand-side stakeholder representation
3. Identified issues that are not easily addressed by one company and within one year
4. Impacts that preferably have a global scope and relate to a major issue (e.g., deforestation, child/slave labour, AMR, etc.)
5. Issues where Nutreco plays a leadership role in influencing direction and mitigation implementation.

Topics addressed by other departments



Several of the topics represented on Table 1 (page 11) are already being managed by other Nutreco departments.

These three issues correspond to Human and labour rights (E&C), Occupational health and safe work environment (HSE) and employee development (HR). Additionally, our OpCos can elect, where relevant, to engage the local communities by celebrating or performing services for the community in an annual Community Day (HR).



Human and labour rights

Framing the issue

Responsible companies give a high priority to helping ensure decent work and promoting universal workers' rights. This is a fundamental goal in itself, but also crucial for a socially sustainable world economy.

The UN Guiding Principles state that companies may be involved with adverse human rights impacts either through their own activities or as a result of their business relationships. Business relationships are understood to include relationships with all entities in the company's value chain. As part of their corporate responsibility to respect human rights, companies are expected not only to avoid causing or contributing to adverse human rights impacts, but also to address human rights impacts that are directly linked to their operations, products or services by their business relationships, even if they have not contributed to those impacts.

Adverse human rights impacts can occur at any level of a supply chain – from the first tier of direct or strategic suppliers,

all the way down through multiple layers of sub-suppliers and sub-contractors, to those providing the raw material inputs. For some companies, relationships with suppliers are held by their licensees, or may be intermediated by vendors or other agents, creating complex structures. To meet our responsibility to respect human rights, Nutreco needs to understand human rights risks at all levels of our supply chain – not only in the first tier.

We believe it is important to promote and protect fundamental, universal workers' rights. These include a minimum of workplace rights in four main categories: freedom of association and the right to collective bargaining, the abolition of child labour, the elimination of forced or compulsory labour, and the elimination of discrimination.

Because of the nature of our business, efforts to combat child labour are especially important for us, and combating forced labour is another priority area. Nutreco has zero tolerance towards slave labour or slave-like conditions. We work to promote respect for basic labour rights not only for our own employees, but also for our suppliers' employees.

We have developed a Supplier Code of Conduct that clearly addresses our demand that our suppliers respect basic labour rights in their operations. We also encourage our suppliers to demand and control respect for labour rights with their own suppliers. Each year, we conduct sustainability audits, that address some labour rights issues.

In 2022, we launched an updated internal Nutreco Code of Conduct in which we clearly state that we respect and support basic labour rights among employees.

Our approach

Nutreco is committed to protecting Human and Labour Rights (HLR). In order to identify, prevent, mitigate and account for our adverse human rights impacts, Nutreco addresses two aspects:

a) Internal Operations with direct control

For Nutreco's internal operations, HLRs are addressed and protected by our Code of Conduct and HR policies. In Mergers & Acquisitions and Joint Venture projects we assess HLR risks associated with the targets/participations under consideration. Upon entry we ensure standards and policies that are equal to, or on par with our own.

With HLR risks being appropriately anchored in relevant policies, and conveyed via training and communications, we apply a reactive approach. We rely on employees and management to uphold our values and standards and to report any deviations. We will investigate any complaints or concerns reported by external stakeholders.

b) Our supply chain where we have indirect control or influence

For suppliers and other business partners, Nutreco will carry out risk-based human rights due diligence. The process will include assessing actual and potential human rights impacts, integrating and acting upon the findings, tracking responses, and communicating how impacts are addressed.

In order to account for how we address our human rights impacts, both internally and externally, Nutreco will:

1. Communicate about them externally, particularly when concerns are raised by or on behalf of affected stakeholders, and report on how we address them.
2. By 2022, we will develop a risk rating system of our suppliers to evaluate their risk of violating basic human rights. If a high risk is identified, the supplier must be audited before it can be an approved supplier to Nutreco.
3. All ingredients will pass through a risk-assessment (Ingredient and Supplier Assessment Management), and Nutreco will engage in a rotational sustainability audit for suppliers from high-risk geographies to engage with them in process improvements if material sustainability risks are perceived.



Occupational health & safe work environment

Framing the issue

We want to ensure a healthy and safe working environment for all our employees, visitors and contractors. In line with our values, we aim for zero fatalities, injuries, occupational illnesses and disablement to our employees or anyone who is impacted by our business. This applies to our workplace, the environment in which we operate, as well as our supply chain.

Our approach

Nutreco's priority is to work towards a healthy and safe environment for our own employees as well as third parties working in our facilities. We believe that ZERO severe injuries or fatalities is possible, and we develop procedures and instructions to be used in our activities to achieve that goal. With a robust system of Health, Safety and Environment (HSE), we are working on a continuous process of improvement through training and awareness from top management to all our colleagues.

In collaboration with SHV and Operations, Nutreco will:

1. Implement systems to guarantee all new workers receive HSE induction when they start working.
2. Benchmark and monitor different KPIs according to OSHA (Occupational Safety and Health Administration) standards.
3. Continue with our audit processes and follow up on all non-conformities.
4. Increase all our leaders' awareness by implementing VFL (Visible Felt Leadership) programs in coming years.
5. Investigate all HSE incidents in our facilities and any incidents that happen to our colleagues in third-party facilities.

Topics addressed by other departments



Employee development

Framing the issue

Today, maybe more than ever, employees are seeking a fulfilling work environment that offers opportunities for personal and professional growth.

At Nutreco, we want to make sure that our employees have the opportunity to develop themselves, grow in their careers and contribute in ways that support our shared values. To this end, our NSP will create opportunities for employees to get involved in sustainability initiatives at a local level, supported by Nuterra Champions and cluster-level sustainability leads. We will hold global employee engagement meetings twice a year through our local Nuterra representatives, to support employees in communicating their thoughts and concerns and encourage best practice dissemination.

We revised our talent management process in 2018, to be more focused and efficient, establishing quality development plans for employees, and ensuring leadership succession.

Our approach

Through our Human Resources department, we will ensure that all employees have access to training and opportunities for advancement in line with their talents and ambitions. We will offer performance reviews twice annually to align goals, development and performance with Nutreco's values: capable, caring, collaborative and innovative.



Business Partner Code of Conduct

Since the release of our Vision 2020 strategy (in 2012), Nutreco has implemented a Supplier Code of Conduct that addresses a number of our sustainability principles, such as human rights and respect for ecosystems. Our suppliers must confirm they operate according to these principles. We have also implemented a system where both the products we buy and the suppliers we have are evaluated and risk rated from a sustainability perspective. Each year, we conduct about 15-20 sustainability audits where some human right issues, such as child labour, are part of the audit checklist.

In 2020, Nutreco launched an updated and renamed internal Business Partner Code of Conduct that states how our company respects and support basic human rights.

We provide Division "Procurement" departments with instructions and guidelines for products are rated high risk from a sustainability perspective, such as marine ingredients, soy and palm oil, to manage and mitigate the identified risks.

We have since (2020) revised the Business Partner Code of Conduct (formerly called Supplier Code of Conduct) and its' respective dissemination process. Large suppliers will have the Code included as a criterion in their global frame work agreement. In addition, all suppliers will receive the Code by email stating that when they engage into business with Skretting / Trouw Nutrition / Nutreco they accept and comply with this Code of Conduct.



Key external communication issues

OpCo management and Sustainability Champions



Nutreco has the ambition to communicate more strategically and more often on sustainability issues but we also understand that communicating too much can dilute the impact. So, we asked ourselves, in what areas do we want to be thought leaders?

We believe that our greatest opportunities exist in communicating on issues:

- That have educational potential – where there is a need or an opportunity to help close an awareness gap between our sustainability issues and challenges and societal perceptions (including customers and their clients)
- That enable us to show leadership in the sector – where we are active and/or play key roles in improving or mitigating the negative impacts
- That offer the potential for market development – in countries and/or on projects in which we help change or offer nutritional solutions and technical knowledge

Identifying these communication opportunities then helped us identify key issues where communication can really help educate our stakeholders and position Nutreco. These, of course, start with a focus on our products and their sustainability attributes, but also focus on critical issues and collaborations where we are helping make a difference.



Proposed categories:

- Sustainable products and services (includes novel ingredients, animal health, procurement, footprint)
- Stakeholder partnerships
- Community development projects

It is suggested that OpCo management teams encourage and promote a designated Sustainability Champion. This Champion can be an enthusiastic volunteer that can rally internal support for developing and leading sustainability projects within the OpCo.



The Champion will be able to share experiences and learn from other Champions around the world on best practices, and sustainability improvement projects on our internal Yammer platform. The objective is that if an OpCo thought of a good idea, developed it and implemented with success, why keep it "limited" to only one OpCo? Sharing will encourage and grow a community of Sustainability Champions across the globe with common interests.

Appendix A: Summary of our ambitions

Appendix A: Summary of our ambitions



Health and welfare

Animal health	Deploy expert teams to strategic clients to address health and welfare. Obtain local or international independent animal welfare certification by 2025.**
Anti-microbial resistance	<ol style="list-style-type: none"> Engage with governments to promote regulatory reform. No preventive* usage of antibiotics in our products and services. No use of antibiotics for growth promotion in our products and services. Absolutely no use of antibiotics categorized by WHO*** as “Critically Important for Human Health” (CIA) in our products and services <p>Business opportunity: Deploy expert teams to strategic clients targeted as “never ever” protein product producers.</p>

* Ensure no preventive usage of antibiotics in our products and services. Any order of medicated premix/feed should be accompanied with a valid prescription from an authorized professional.

** Where and when relevant.

*** as published in “Critically important antimicrobials for human medicine : 6th revision”, <https://www.who.int/publications/1/item/9789241515528>

Climate and circularity

Climate change	<ol style="list-style-type: none"> Adopt Science-Based Targets that include a 30% reduction (absolute) in greenhouse gas emission reductions for Scope 1 & 2 as well as a 58% emission reduction (economic value-added) for Scope 3; using 2018 as the baseline year. Use LCA to evaluate footprint of our products and formulations, and impact at the farm. Implement footprinting capacity in existing farm models.
Natural resources in combination with Ecosystems and biodiversity	<ol style="list-style-type: none"> Trace all agricultural products back to the country where cultivated. Source 100% of marine ingredients from certified sources. Engage all non-certified ingredients in a Fishery Improvement Project (FIP). Nutreco will analyse the risks of deforestation and conversion in our supply chain: <ol style="list-style-type: none"> Make a public commitment to transition to a deforestation and conversion free supply chain. Develop an action plan, timelines and time-bound, geographically specific milestones to achieve it. In heavily impacted geographies, source 100% of agricultural row crop commodities from land conversion-free sources. Participate in at least one multi-stakeholder platform to advance our commitment. Promote industry workshops to support best practices and encourage increases in production to satisfy demand. OpCos will ensure: <ol style="list-style-type: none"> 100% of office paper certified to the Forest Stewardship Council (FSC) label. 100% of wooden pallets FSC-certified or equivalent.
Novel Ingredients	<ol style="list-style-type: none"> Ensure at least 5-10% of ingredients in complete feed come from alternative novel sources*. Include a sustainability filter in the innovation stage gate process to ensure no environmental impact trade-offs. Nutreco will invest a minimum of €30 million annually in innovation.
Packaging	<ol style="list-style-type: none"> Ensure all packaging (on raw materials and products packed by Nutreco) is 100% recyclable, reusable or compostable; avoid single-use plastic when possible. Minimize impact by using: <ol style="list-style-type: none"> Less material per product More recycled and renewable materials
Energy	<ol style="list-style-type: none"> By 2025, Nutreco will consume less than 2% of coal and less than 5% of fuel oil. By 2030, Nutreco will be coal-free and fuel oil-free. Energy consumption per volume will be down by 10%.
Waste	<ol style="list-style-type: none"> By 2025, more than 50% of waste recycled; less than 15% of non-hazardous waste to landfill. By 2030, more than 60% of waste recycled; ZERO non-hazardous waste to landfill.
Water	Nutreco OpCos with high scarcity will implement Water Efficiency Programmes (WEP).

* Novel ingredients are non-conventional feed ingredients or those that need further development before being utilized as alternatives for conventional ingredients traditionally used by feed manufacturers. We consider novel ingredients those that have been introduced to our formulations after 2015.

** Where and when relevant.

Appendix A: Summary of our ambitions



Good citizenship

Community development	Reach 12,000 small farmers in emerging economies where Nutreco operates and raise their incomes above poverty levels.
Human rights and labour rights	<ol style="list-style-type: none"> 1. Verification required by OpCo or functional department if centrally procured. 2. Engage in rotational sustainability audit for suppliers from high-risk geographies to engage with them in process improvements. 3. Develop and implement an improved human and labour rights risk rating system for suppliers and require audits for high-risk suppliers.
Local communities	<ol style="list-style-type: none"> 1. Develop local communities by sourcing local goods and services. Seek to develop industries in economic developing countries that can supply us with raw materials from local resources. 2. Develop local supply of raw materials for production in markets in Africa and Asia. 3. Organise local community day where Nutreco employees engage in projects to help the local community.
Diverse and futureproof workforce	<ol style="list-style-type: none"> 1. Ensure 30% women in senior leadership positions by 2025. 2. Ensure senior management teams have at least one member from an underrepresented nationality by 2030. 3. Improve Inclusion index year over year. 4. Undertake potential pay gap analysis and implement corrective actions if necessary.

**Where and when relevant





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