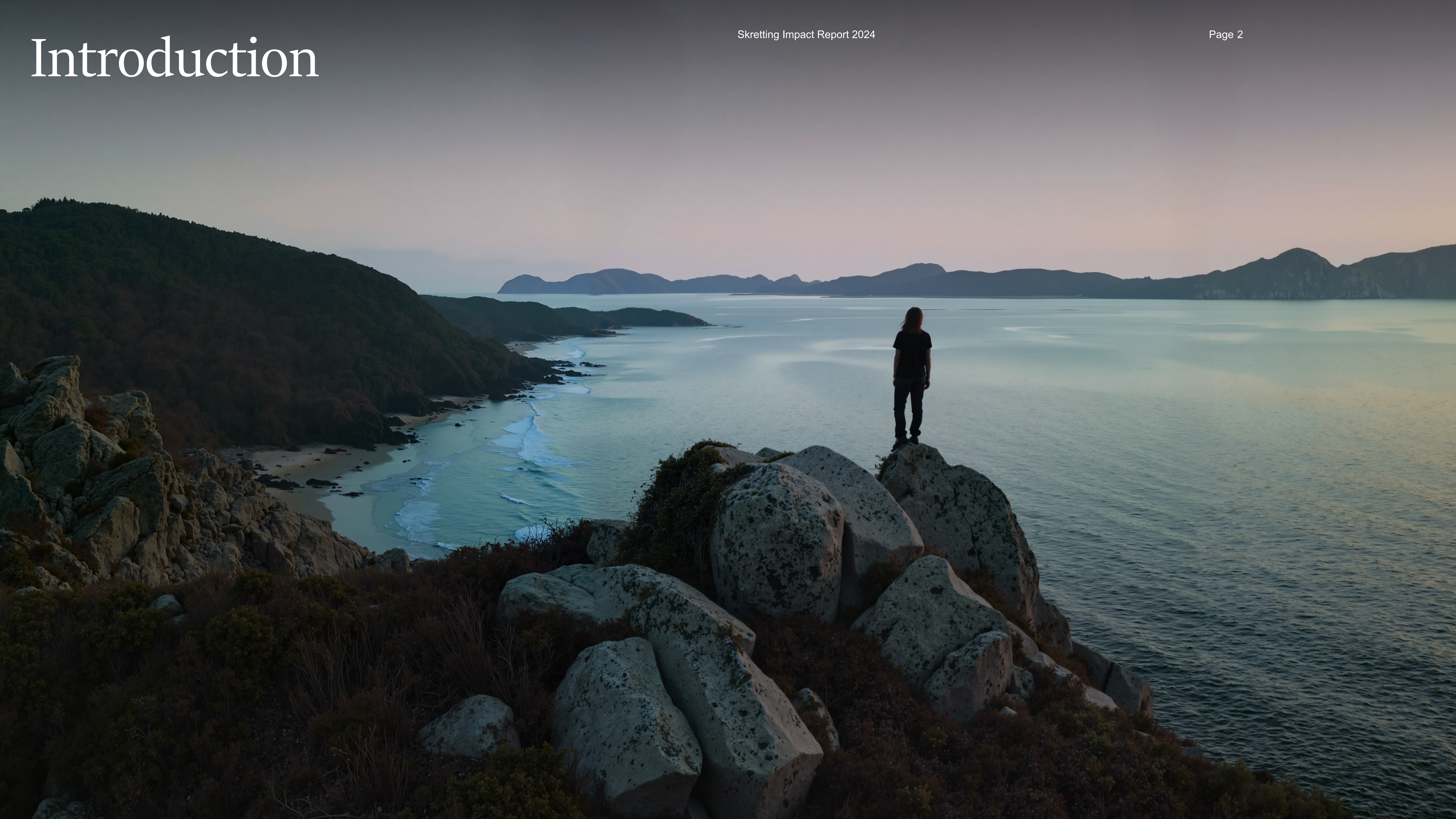




Impact Report 2024

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Message from the CEO



At Skretting, it's all about people, impact and what we can do together.

In my first year as CEO of Skretting, I have prioritised visiting many of our operations worldwide – meeting our teams and our customers, deep diving into our markets, understanding the different opportunities and challenges for our industry, and making connections. Seeing how our teams across the globe keep our customers at the heart of everything we do, while constantly pushing boundaries to increase our positive impact, makes me feel both impressed and humbled.

The many open and honest conversations with our partners and stakeholders during these past months have provided valuable insights, and strengthened my belief that we need to work together across our value chain to unlock the full potential of this industry. We feel a great responsibility to make sure that our connections are strengthened even further, so that our collaborative efforts can help us achieve even greater impact.

As we look towards the future, our vision is to be the leading nutritional solutions partner in aquaculture. We want to help our customers thrive by delivering

sustainable, profitable growth everywhere we operate, with a clear strategy to be the absolute best in three main areas. These are: **innovating with impact** – focusing on health, efficiency and sustainability and maximising our unique, groundbreaking Nutreco Exploration discovery platform; **customer intimacy** – putting customers at the heart of everything we do and deeply understanding their unmet needs; and **sustainability**, which we are pursuing through a brand new value proposition called ACT – Co-creating change which we proudly launch in this Impact Report.

ACT stands for leading with Action, building Connections, and ensuring Transparency. By operating in different markets around the world, we have learned that sustainability does not mean the same thing everywhere. ACT is an acknowledgement that one solution does not fit all, and it reflects our commitment to work together with farmers to help them deliver on their desired sustainability ambitions according to the specific realities they face.

We are confident that we are in a good position to support our industry in creating change with impact. However, it will require us to confront obstacles and work

closely with our partners towards our purpose of Feeding the Future.

Skretting is an ambitious player in an innovative industry responsible for the challenge of feeding close to 10 billion people by 2050 in a safe, healthy and sustainable way. The demand and growth potential are there, but production constraints and short-term thinking are limiting our expansion. At the same time, we need to do better at increasing transparency and improving our operations across the whole value chain to maintain and enhance our social license. Failing to do that will not only impact our profitability, but also jeopardise global food security, as the industry must scale production responsibly to meet demand without harming the planet.

We invite our partners in the industry to embrace long-term thinking and collaboration to secure investment, innovation and progress in sustainability. We commit that, together with the teams in all our regions, Skretting will play a leading role and help aquaculture reach its full potential.

Bastiaan van Tilburg
CEO

About this report

Our approach

Skretting has a longstanding commitment to reporting on the progress we make on our sustainability journey. We have issued sustainability reports since 1999, with our first reports compiled by Skretting Norway. We have also reported on our global business activities since 2013. Our sustainability initiatives are closely linked to our business operations and priorities.

Scope of this report

The quantitative data reported here outlines our main sustainability activities and achievements during the calendar year from January 1 to December 31, 2024, unless otherwise stated. The report covers all the companies that are part of Skretting, which represents Nutreco's aquaculture feed business line. Nutreco is owned by private company SHV, and all public financial information is reported through SHV. This report provides only limited financial information.

Assuring our disclosures

Skretting does not have external verification of the disclosures made in this report.

External links

Throughout this report, we have included links to a number of external websites to make it easier for the reader to learn more about our projects, partners and goals. These links are for reference only.

Collaboration with stakeholders

Skretting invited various stakeholders to contribute their own views on relevant topics addressed in this report. See [Engaging with our stakeholders](#) for more information.

Business units (BUs)

Skretting is organised into five BUs, which are referred to throughout the report as:

- **BU Asia:** China, India, Japan and Vietnam
- **BU Latin America (LatAm):** Ecuador and Honduras
- **BU Middle East and Africa (MEA):** Egypt, Nigeria, Middle East & Africa Export and a joint venture with Tunga Nutrition in Kenya
- **BU Salmon:** Australia, Chile, North America and Norway
- **BU Southern Europe:** France, Italy, Spain and Turkey

Skretting makes an impact

In 2024, through our feed, we contributed to the production of more than 24 million portions of seafood meals each day across the globe.

Skretting Impact Report 2024

Page 7
Introduction



Our 2024 Impact Report highlights

(Click the arrows to read the article)

In this report, we launched ACT, our **sustainability value proposition** aimed at leading with action, building connections and ensuring transparency

Disclosed our use of **antibiotics**, including where we use them and how much we use

Achieved 85% of our **marine ingredients** certified or coming from a Fishery Improvement Project (FIP), an increase over our 2023 performance

99.6% of our global **soy** purchases comply with our intermediary goal towards 100% deforestation free soy

Opened our Nutreco Garden of the Future, which will help Skretting create unique, ground-breaking health solutions through the use of **PhytoComplexes**

On **total carbon footprint**, we achieved scope 1 and 2 reductions of 34.9% and scope 3 reductions of 10.2% compared to our 2018 baseline

Provided **clear guidance** on what is and is not a carbon footprint reduction

95% of our **packaging** is easily recyclable

Worked to ensure employees feel respected and empowered through our **Diversity and Inclusion** Committee

Gathered inputs from our customers and other **stakeholders** on the main topics driving their sustainability agendas

Successfully achieved a notable reduction in **Total Recordable Case Frequency (TRCF)** of work-related injuries and illnesses for the third consecutive year

RoadMap 2025

Our Sustainability Roadmap 2025 outlines Nutreco's sustainability approach and objectives, with measurable targets under three focus areas:

Health and welfare

Focus: Antimicrobial resistance

- Innovating new products and services that will reduce dependency on antibiotic usage in animal husbandry
- Adopting four-step targets that will significantly reduce antibiotic usage by creating business opportunities for clients

Climate and circularity

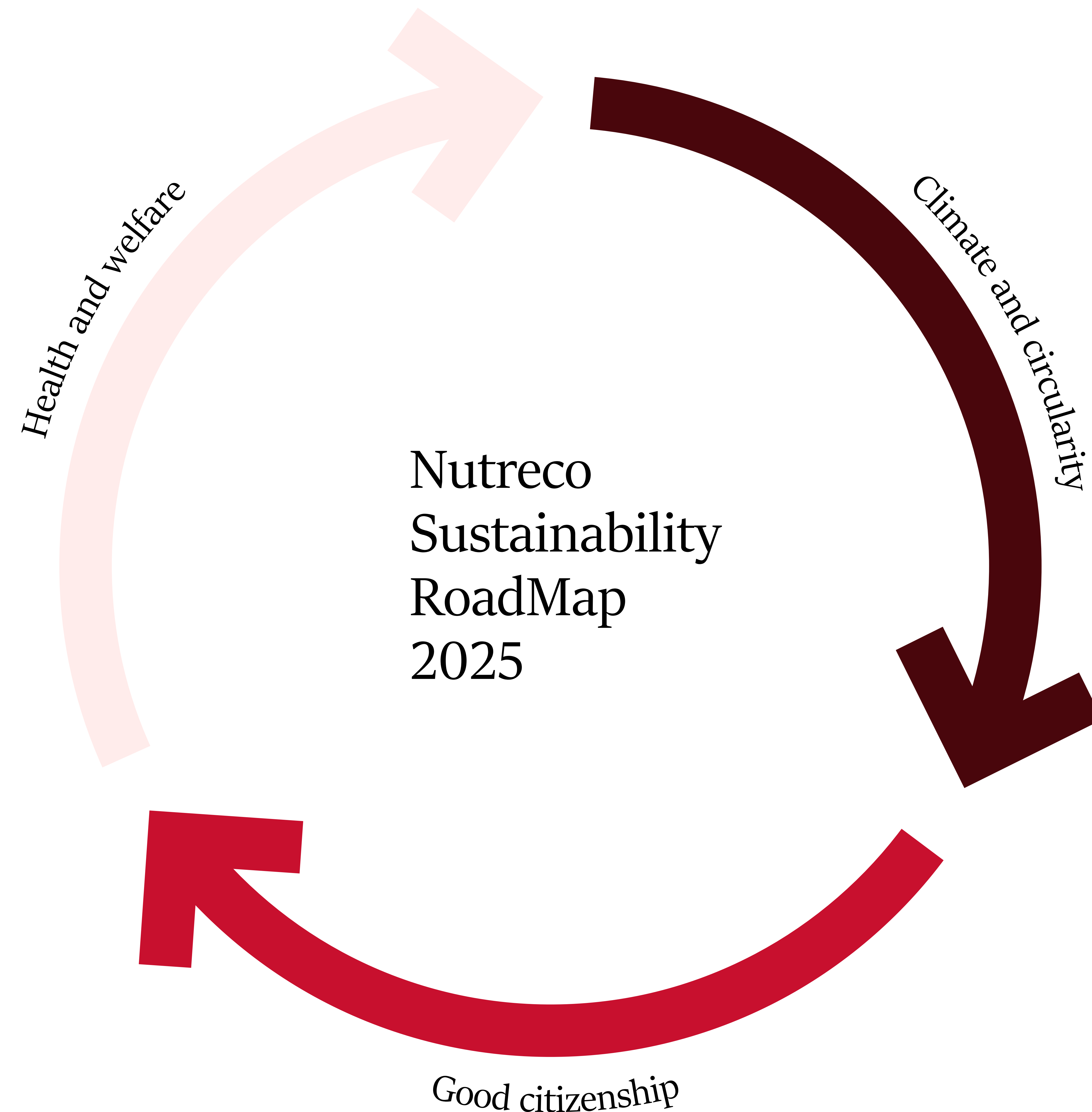
Focus: Reducing GHG emissions

- Setting science-based targets for reducing emissions through energy efficiency programmes and sustainable ingredient sourcing, incorporating lifecycle assessment methodologies and utilising new ingredients
- Addressing the responsible handling of natural resources, biodiversity and ecosystems

Good citizenship

Focus: Diversity and inclusion

- Building a more diverse and inclusive workforce
- Empowering local communities with best practices and technology to help people raise themselves out of extreme poverty through farming sustainability



Chapter 1

Health and welfare



Health and welfare: Our progress

Health and welfare are at the core of everything we do at Skretting and are areas where we can make a big difference – not just by innovating with impact, but also by working across the value chain. 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.

Our main focus area under the health and welfare pillar of our Sustainability RoadMap 2025 is antimicrobial resistance (AMR), which is a growing problem for both humans and animals worldwide. At Skretting, we are helping to reduce AMR through a focus on prevention and reducing antibiotics given to animals – in particular, the most critical antibiotics for human health.



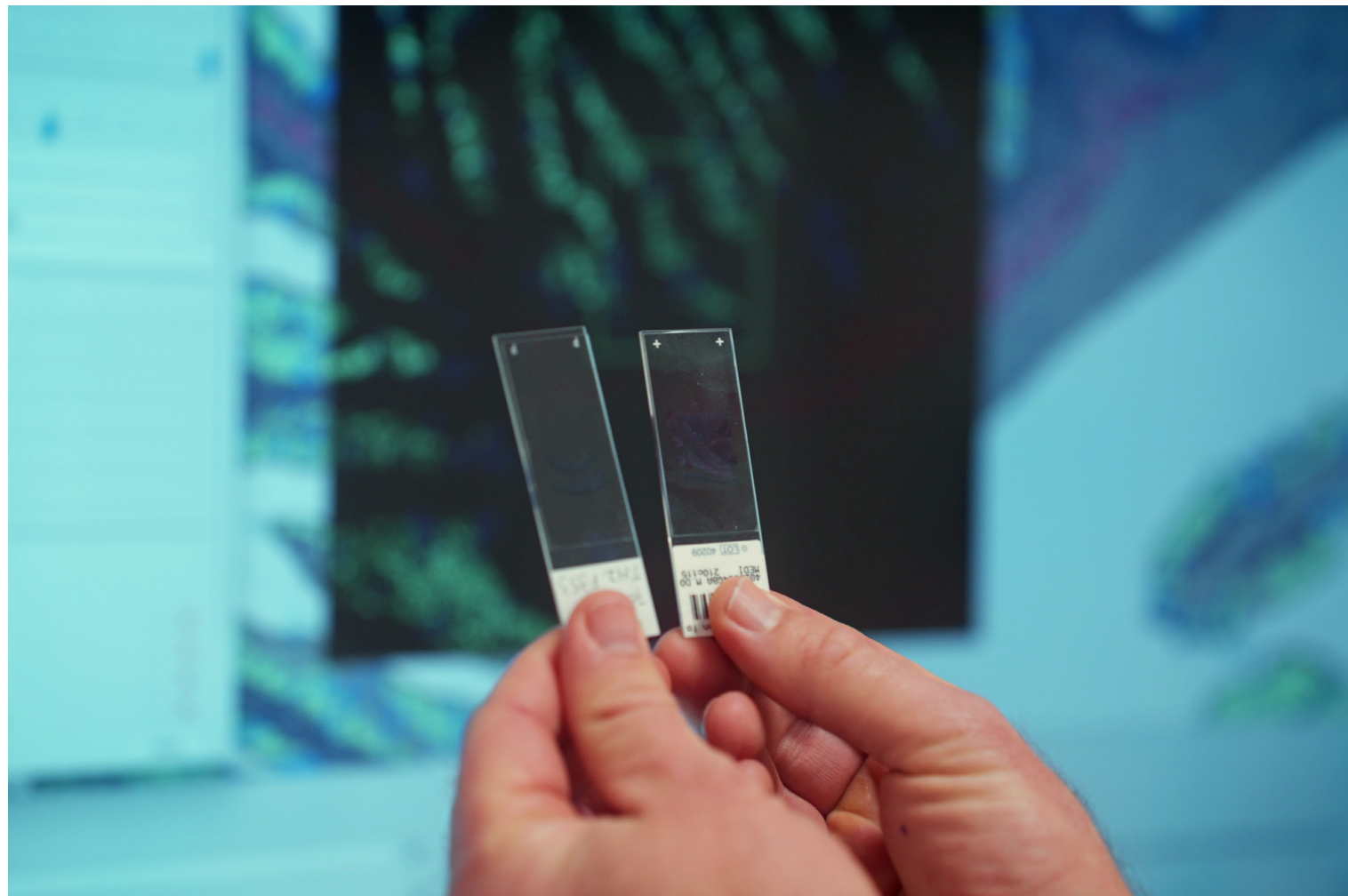
Improving health and welfare in fish and shrimp

Over the past decades, Skretting has kept its focus on developing and testing new diets, and innovating with impact to improve fish and shrimp health and welfare in an ever-changing market. Every year, we experience challenges; by being open about them, we want to inspire other stakeholders to connect with us and help find solutions together.

When new bacteria arise in new species, it takes time to develop new vaccines. While waiting for effective vaccines, Skretting will continue producing medicated feed based on a veterinarian’s prescription. We will do this when there are no other feasible alternatives to treat fish and shrimp – even though it might mean an increased use of antibiotics – and as long as the treatments are limited, and in alignment with the animal welfare act that gives animals the right to receive treatment.

Skretting’s approach to this difficult challenge is to collaborate across the value chain. Partnering with customers makes it more likely that we will be successful in improving animal welfare, since we can share information and develop solutions together.

Another way we are addressing this challenge is through Nutreco Exploration, which is harnessing the power of the plant kingdom for application in aquatic species. After years of testing, in 2025, we will launch new products including PhytoComplexes, that bring to market unique, ground-breaking solutions to address some of the most relevant diseases in aquaculture (read more in the [Nutreco Exploration: Harnessing nature’s complexity to solve modern challenges in animal production](#) section of this report).



Anna Hesby Nessa
Global Product Manager Health

Reflecting on our progress in reducing antibiotic use

With fish health personnel engaged in research, product development, and local company operations, Skretting has consistently striven to reduce farmers' dependency on antibiotics. However, it is essential to recognise that bacteria and viruses have existed on Earth far longer than humans, and they continue to adapt in order to survive and thrive. When infections occur, animals have the right to receive treatment in accordance with the Fish Welfare Act.

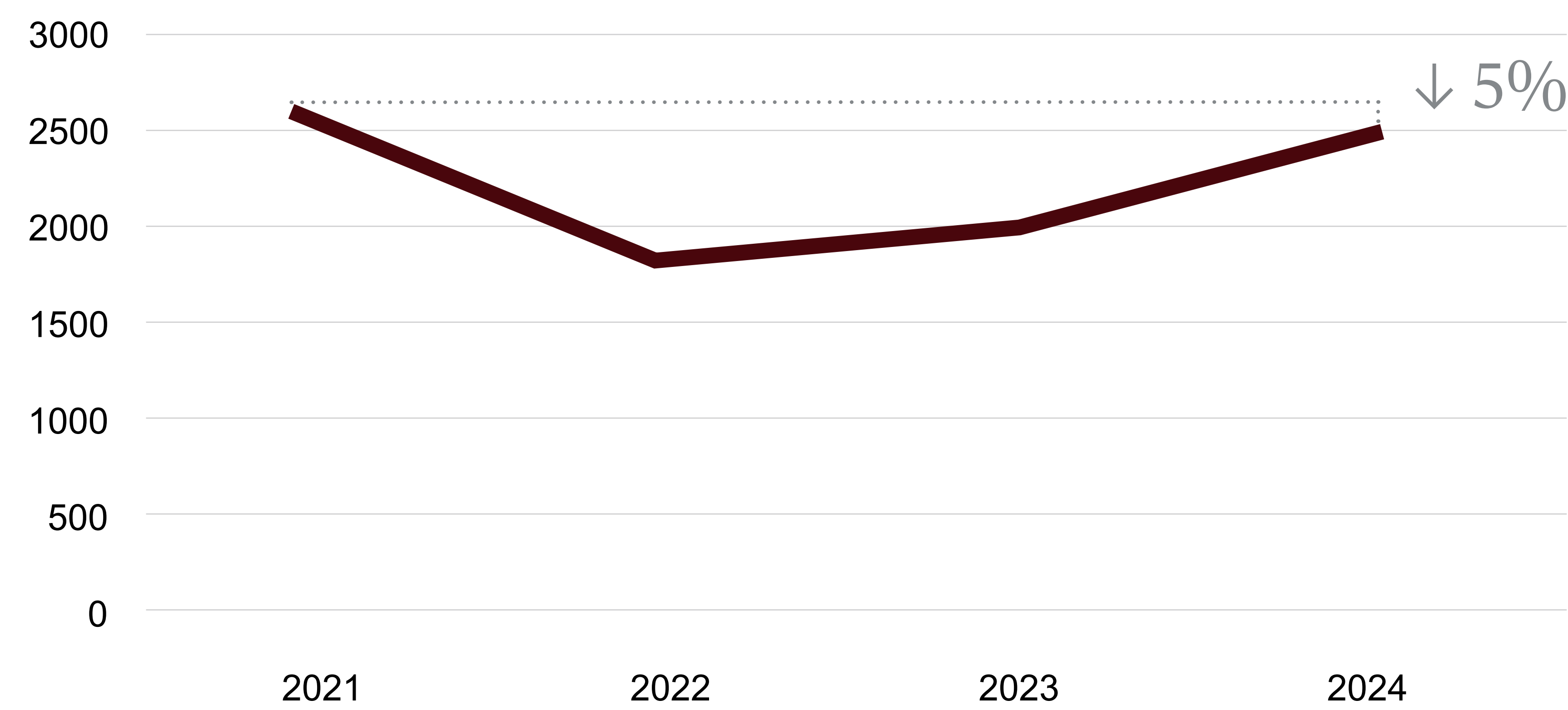
In response to new and emerging diseases, Skretting advocates for the production of high-quality, strictly regulated medicated feed rather than promoting the on-farm mixing of antibiotics. However, despite numerous efforts to minimise antibiotic usage, veterinarians prescribed a higher quantity of critically important antibiotics (CIAs) in 2024 than in 2023 to address diseases that could not be treated with other alternatives – although the amount remained lower than in 2021. Most farmers have successfully reduced their antibiotic use; however, the exceptionally warm summer of 2024, particularly in Southern Europe, led to an increase in bacterial issues, resulting in higher antibiotic usage in certain regions.

Antibiotics in Skretting feed

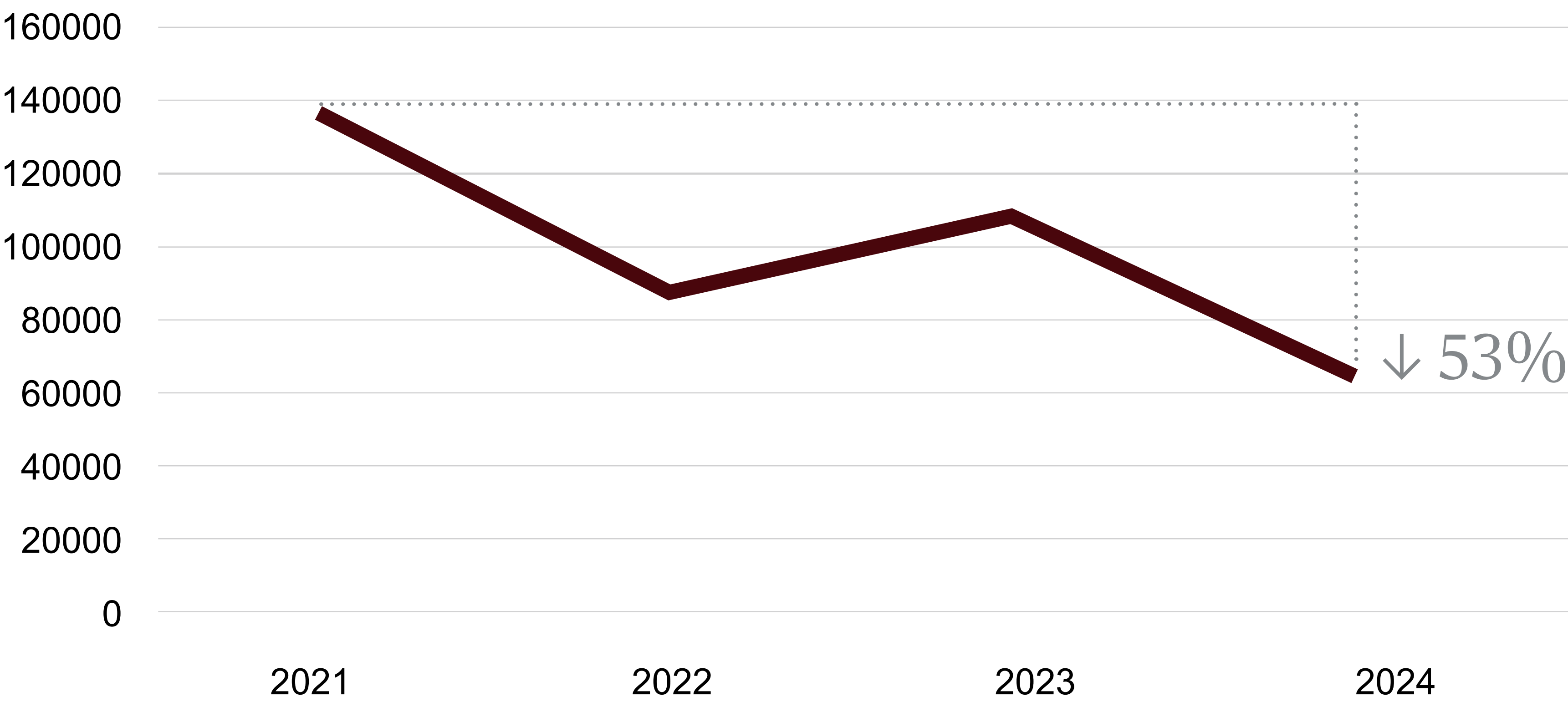
% of total feed sales

	Australia	Chile	Italy	North America	Norway	Spain	Turkey	Total Skretting
CIA feed	0	0	0.5	0.03	0.0005	0	0	0.02
Non-CIA feed	0.01	9.6	0.7	2.0	0.04	0.5	0.3	1.4
Total use of antibiotics	0.01	9.6	1.1	2.0	0.04	0.5	0.3	1.4

Total kg active substance of CIA



Total kg active substance of non-CIA



Reducing the use of antibiotics in feed:
We can report a 5% decrease in the use of CIA and a 53% decrease in the use of non-CIA since 2021. The percentage of total feed containing antibiotics was 1.4% in 2024, a decrease from 1.6% in 2023.





Off to a good start:
Shrimp larvae can benefit from starter diets like Elevia. Read more about Skretting's LifeStart strategy on the next page.

LifeStart: Redefining early-stage aquaculture



Eamonn O'Brien
Global Product Manager
LifeStart

Skretting’s LifeStart ambition represents a bold and transformative commitment to redefine early-stage aquaculture through pioneering nutritional innovation. By focusing on the critical hatchery and nursery phases, Skretting delivers precision nutrition through high-performance products, such as Elevia and Jade, and through strategic partnerships that bring ready-to-feed ORI-N3-enriched Artemia nauplii and Ignis “nature’s baby food” Calanus copepods into producers’ hands.

These innovations are specifically engineered to enhance survival, accelerate growth, and shorten production cycles – enabling shrimp and fish to reach their genetic potential from the very beginning and helping us progress towards our purpose of Feeding the Future. Looking ahead, the groundbreaking products and concepts we have in the pipeline are on track to keep pace with the ever-changing economic landscape.

Our LifeStart strategy is not only about optimising performance, but also about embedding sustainability at every stage of production. Single-diet approaches, such as Elevia, reduce the need for fragmented, untraceable feed mixes, improving water quality and biosecurity while simplifying operations. The integration of innovative alternative feeds and ingredients supports more cost-effective and environmentally responsible production, while continuing to deliver high standards of animal health, performance, and survival.

From a sustainability matrix perspective, LifeStart innovations contribute to reducing feed waste, minimising water pollution, improving feed conversion ratios, and enabling efficient resource use. These effects directly support Skretting’s broader sustainability goals, including carbon reduction, optimised raw material sourcing, and resilient food systems.

As global demand for protein rises, Skretting’s LifeStart innovations embody the principle that sustainability begins at the start of life – empowering aquaculture producers with tools that are not only profitable and reliable but also responsible.

Nutreco Exploration: Innovating with impact to solve modern challenges in animal production

Nutreco Exploration combines expertise in ingredient discovery, creation, and production, with the ability to leverage advanced technology and the natural efficacy of plants and bacteria. Through Nutreco Exploration, Nutreco aims to be the globally recognised leader and preferred co-development partner for ultra-specialties in feed, offering solutions with unmatched efficacy exclusively to Nutreco, Trouw Nutrition and Skretting customers.

Nutreco's Garden of the Future, our centre of excellence located in Switzerland's Phyto Valley, oversees the entire process from discovering to producing PhytoComplexes, and soon Bacto-complexes. The Nutreco Exploration team, with their deeply rooted expertise on the plant world, works closely together with Nutreco businesses, such as Skretting, which bring industry-leading knowledge on animals: combining both areas of proficiency enables us to create groundbreaking solutions that enhance animal health and performance.

Unleashing the power of nature

A PhytoComplex is a combination of specialised metabolites that exist in a plant. It is unique because it is used in its whole form, including roots, leaves, fruits and mixtures from multiple plants or full-spectrum extracts – this is a totally different approach to phytotechnology, which has historically been based on the pharmaceutical method of using single, often synthetic, compounds in isolation or mixtures. A PhytoComplex contains the full power of the plant, which brings resilience to animals and their complex challenges, such as inflammation and metabolic issues. Using proprietary plants that have never been used before in animal feed and advanced screening methods based on biological models and our proprietary AI tools, Nutreco delivers exclusive products with unmatched efficacy at low inclusion levels.

Developed in close cooperation with aquaculture

PhytoComplexes are discovered and co-developed through a very close partnership between Nutreco Exploration and Skretting. We believe there is great value in developing solutions directly in the context of the animals, optimising every detail for specific species and growth phases. This level of precision during product development is extremely powerful and is not possible without consistent, close collaboration between Nutreco Exploration and the business. It is a totally new way of approaching product development for aqua species – customised to their unique, specific and important challenges.

It is a totally new way of approaching product development for aqua species – customised to their unique, specific and important challenges.



The fantastic work done by the Nutreco Exploration team takes place in Thurgau, Switzerland, also known as the Phyto Valley.

Greater customer intimacy with Skretting 360+

Our Skretting 360+ package of innovative tools and services are designed to optimise feeding, farming, and health management for fish and shrimp. Building on the success of Skretting 360+ in Ecuador, where we have transformed production processes for numerous customers, we're now scaling our global programme to bring these solutions to farmers in other regions. The powerful combination of our customer-centric approach and digital competence is already helping us improve health and sustainability for customers in Southern Europe and India. Read more in the next pages.



Using Skretting 360+ to improve sustainability and efficiency in Southern Europe



The Precision Farming team from Skretting Southern Europe installs a Skretting 360+ system in a Spanish customer's seabass cage.

In 2024, the Precision Farming team at Skretting Southern Europe helped their most innovative and committed customers improve sustainability, animal welfare and production efficiency. Skretting 360+, along with our AquaSim advanced forecasting and analysis solution, were some of the disruptive tools the team gave to customers to help them reach these goals. These tools are becoming tangible game changers, setting new industry standards and breaking old paradigms in Mediterranean aquaculture best practices.

The team managed to reduce customers’ feed conversion ratio (FCR) by 10-30% through Skretting 360+ precision feeding recommendations, optimising their nitrogen, phosphorus and potassium effluents and carbon footprint by helping them improve the management of the feed they buy from us. This not only improved sustainability but also efficiency.

These new digital developments also set the path for significant animal welfare improvement. They are mostly based on advanced sensors, IoTs and computer vision, which are helping to better

understand fish behaviour, through advanced AI mechanisms. With these tools, we can quantify a fish population's health status and wellbeing, detecting and communicating deviations in real time, to drive improved welfare and survival rates and minimise the need for medication.

The main players in the aquaculture industry in Southern Europe, including Avramar, Acuipalma, P2M, OP Del Pesce, Piscifactoría Campoo, and Karsom, have already become Skretting 360+ early adopters, with solid initial results. As a result, Skretting Spain is scaling up its services, reinforcing Precision Farming teams and partnerships, and seeking implementation for more than 30 customers, with 300 units in 10 countries by 2026.

Transforming aquaculture in India with Skretting 360+

Performance improvement metrics

FCR 10-20% reduction	Growth 10-25% increase
Survival 5-20% increase	Size variation 20-25% decrease
Cycle days 8- to 15-day reduction	

India is the world’s second-largest aquaculture producer and one of the largest exporters of seafood. The industry plays a vital role in contributing to the country’s GDP. Shrimp exports, which constitute around 70% of India’s marine exports, have grown remarkably in the last decade – increasing by 136% in volume and 122% in value from 2013-2023. Despite this dominant position, the industry faces challenges, such as productivity, water quality management, feeding efficiency, disease outbreaks, fluctuating export prices, and sustainability concerns. While India’s shrimp farmers navigate these complexities, the potential for growth remains immense, especially if they are able to adopt innovative, sustainable practices.

A smart solution to addressing these challenges in the aquaculture ecosystem is to take a blended approach that combines human expertise with technological intervention, ensuring farmers are aware of the best practices in aquaculture. Leveraging smart technology is essential for enhancing productivity and managing diseases more effectively. This is why, last year, we introduced Skretting 360+, which combines feed and technology with three critical pillars: precision feeding, farm management, and proactive technical support. This enabled us to technify over 300 acres of land, and we observed a 30% repurchase of the feeders used in the system by existing customers.

Since introducing Skretting 360+, we have seen notable results in FCRs, growth, survival, water quality, decreased size variation and reduced cycle days. This has ultimately improved farmers’ efficiency, sustainability and productivity.

We support the implementation of Skretting 360+ with extensive farmer training and continuous technical support. In India, this included more than 20 training sessions for internal teams and approximately three to four farmer meetings conducted monthly to ensure continuous learning and adaptation. We also launched attractive promotional programs and set up experience centres in key aquaculture districts that adopt best aquaculture practices in order to serve as model farms. The trials are now being extended to other species, such as black tiger

shrimp and seabass. We are also conducting trials of ShrimpTalk, Eruvaka’s underwater, acoustics-based shrimp feeding system that provides on-demand feeding, in the country. Over 90% of shrimp and fish farming in India is done by low-income, small-scale farmers. Until recently, they used traditional methods for operating their farms because they did not have access to technology. However, things are changing now. With Skretting 360+, India’s aquaculture industry is adopting smarter and more sustainable practices, enhancing farmers’ performance on traceability, productivity and efficiency.



Pondmother installed on a farm.

Last year, across the globe, summer was warmer than anticipated, raising concerns that prolonged warm periods and rising water temperatures may bring our industry new and complex challenges.

For example, they may facilitate the spread, severity and impact of the bacterial disease Lactococcosis. Since 2023, when the first outbreaks in the Mediterranean Sea were reported, this serious, acute disease, historically associated with rainbow trout, has also spread to farmed marine species. The impact increased last year, both in terms of spread and severity.

Skretting provides antibiotics prescribed by veterinarians; while they are important tools to ensure fish welfare, they are not the solution for diseases like Lactococcosis. Prevention is always a better option, so we are looking for alternative or complementary strategies to antibiotics.

Effective management of Lactococcosis requires an integrated approach involving several elements, such as vaccination, therapy, biosecurity,

nutrition, and genetics. Collaboration by stakeholders across the supply chain is critical to the success of this approach.

In 2024, we created a Good Practices Manual for trout farmers, to enable them to learn more about the disease and to spread awareness that a holistic approach is needed to reduce the impact of Lactococcosis.

We also took action on mariculture, co-developing a series of workshops with the Italian Fish Farmers Association and the National Reference Centre for Fish Diseases. The series is a testament to our vision that complex issues can only be handled through teamwork and a deep understanding of our customers' needs. We collaborated across borders and areas of expertise, with fish farmers, researchers, feed experts, and veterinarians joining in the effort, sharing knowledge and finding synergies to build a shared strategy. This interactive program resulted in the publication of a Good Practices Manual for marine species.

At Skretting, we believe that tackling challenges is not a one-company show. We want to be the preferred partner by working together across the industry.



Skretting Italy and Norway co-developed workshops in which Kristine Marie Bjerkestrand from Norway shared cutting-edge biosecurity technologies and highlighted the importance of innovative solutions to drive the industry forward.

Chapter 2

Climate and circularity



The climate and circularity pillar of our RoadMap 2025 sustainability strategy is primarily focused on reducing our greenhouse gas (GHG) emissions. To achieve this, we set ambitious, science-based targets for emission reductions through energy-efficiency programs, sustainable ingredient sourcing and feed formulation. By incorporating lifecycle assessment methodologies, we aim to minimise our environmental footprint.

In addition to reducing emissions, we are committed to responsibly managing natural resources, biodiversity, and ecosystems in the production of our compound feed ingredients. This involves implementing practices that protect and enhance the health of our ecosystems, ensuring that our operations do not contribute to deforestation, habitat loss, or other forms of environmental degradation.

Feed is a crucial part of the environmental impact of aquaculture products, across species and regions, and has an impact that goes beyond GHGs. Considering the full lifecycle of an aquaculture product, feed represents 60 to 90% of the total footprint (Little et al. - [Aquaculture – 2018](#)). And the environmental performance of feed does not end with the footprint of the feed itself; how it impacts the performance on farms in terms of economic Feed Conversion Ratio (eFCR) and productivity is an essential part of the total environmental impact of feed. Therefore, we should also keep in mind what happens when the feed is used.

● Met target ● On track

Reduce scope 1 and 2 by 30% compared to 2018

Reduce scope 3 by 39% compared to 2018

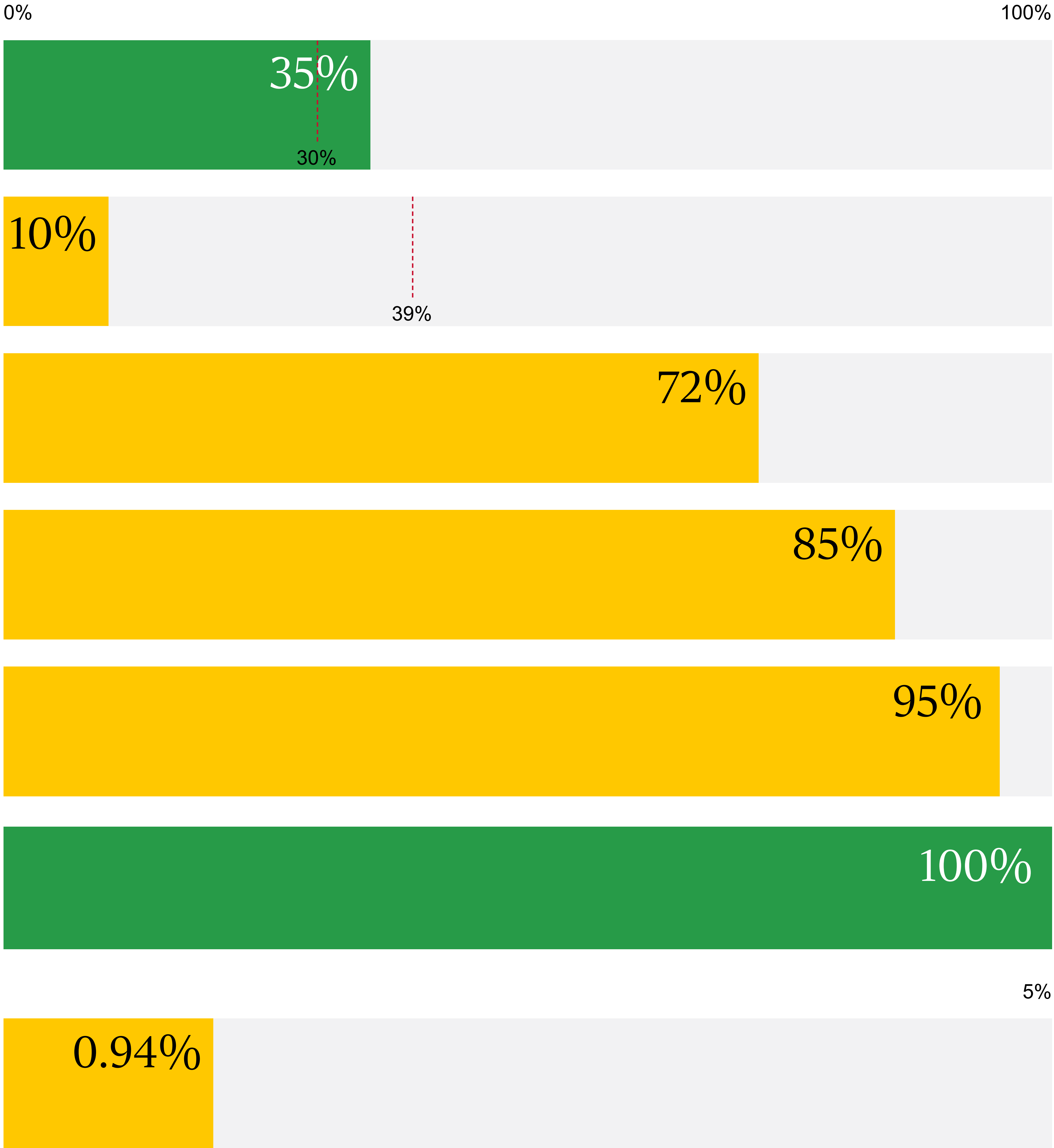
100% deforestation free

100% of marine ingredients certified or coming from an FIP

100% recycled, reusable or compostable packaging

100% free from coal by 2030

5-10% inclusion of novel ingredients in feed formulation



Our performance on GHG emissions

In terms of our total carbon footprint, we reduced absolute scope 1 and 2 emissions (energy, water and waste emissions) by 34.9% from 2018 (baseline) to 2024. Our scope 3 emissions (mainly feed raw materials) decreased by 10.2% over this same period. This resulted in an overall reduction during that timeframe over all three scopes of 11.3%. The specific carbon footprint per tonne of feed produced decreased by 26% from 2018 to 2024.

The long-term trend is positive, due to continuous efficiency improvements and changes in raw material compositions and sourcing. When we examine our business units with the highest production – which are the highest contributors to our carbon footprint – we see a variety of developments, but, overall, a substantial reduction by all BUs over the past two years. The recent reduction is largely explained by

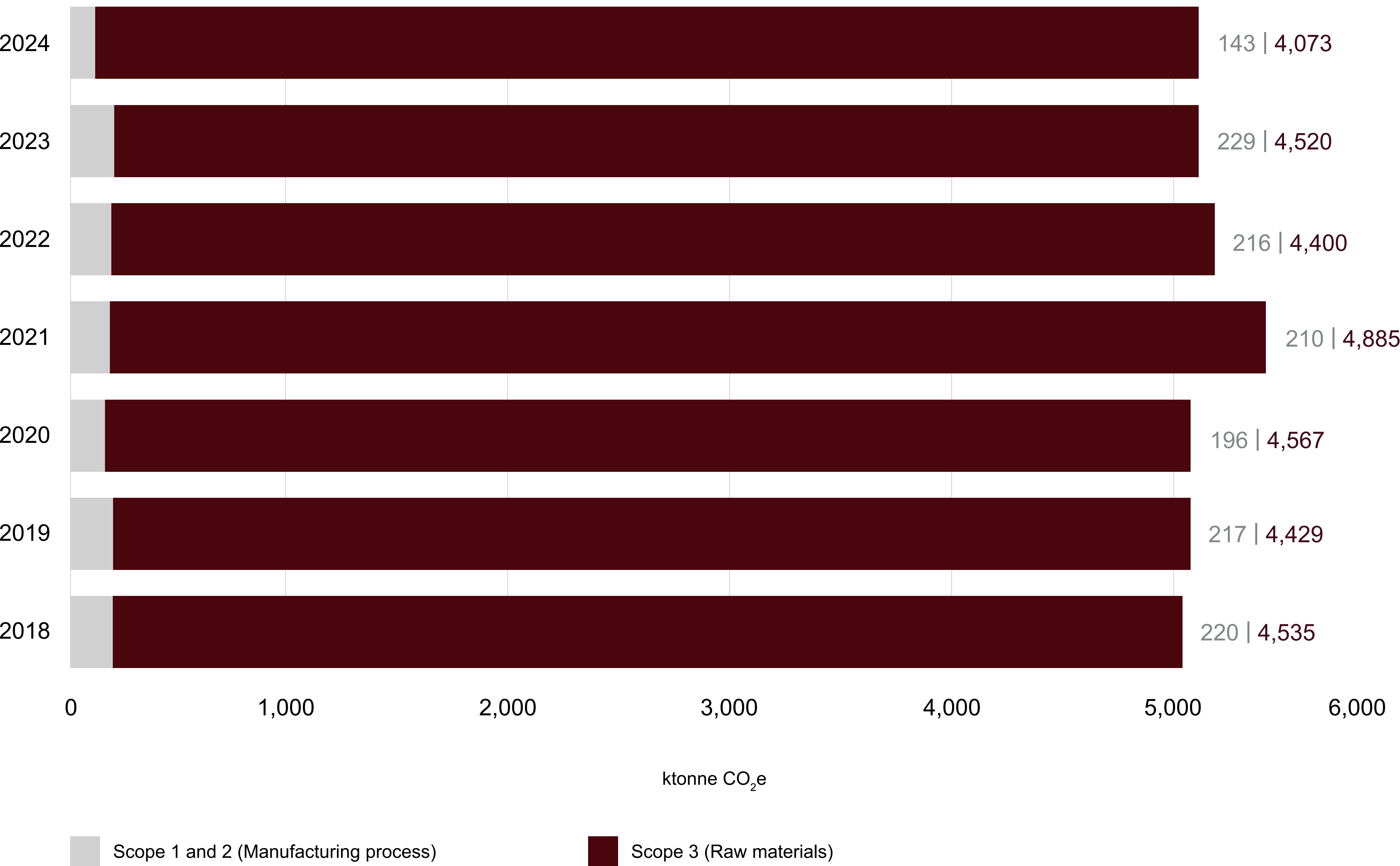
our success in working with our suppliers to receive primary data, eliminating land use change in our supply, a commitment to energy efficiency in our operations and a switch over to renewable energy.

Switching from secondary data to primary data often reduces the footprint of our feed, but this is the result of better data quality, not a reduction in GHG emissions. This means that we need to recalibrate our numbers – also for our baseline. Please read more on how we are addressing this in ['Navigating the challenges of environmental footprints.'](#)



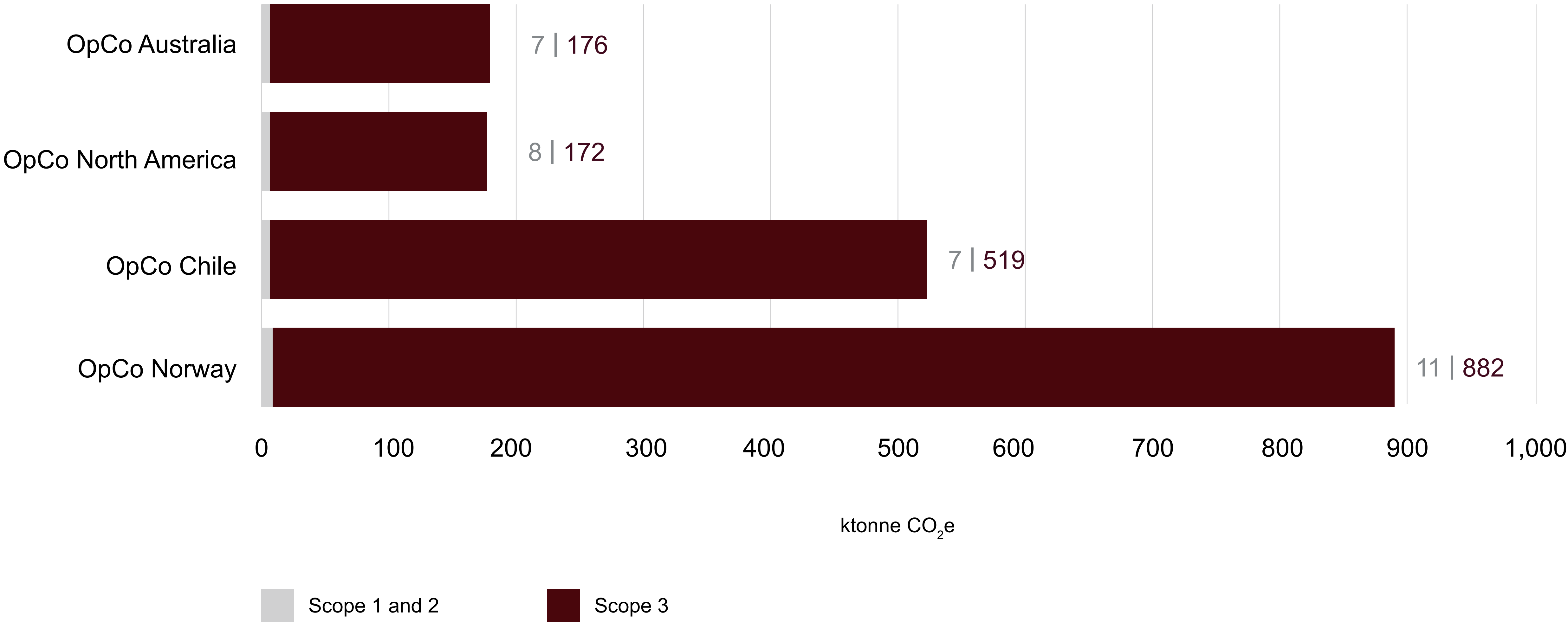
Björn Kok
Technical Lead
Sustainability Metrics

Skretting's global absolute GHG emissions



In addition to disclosing data on our global operations, we present values per BU and more specific data from BU Salmon, which includes Australia, Chile, North America, and Norway. In our salmon business, we reduced both the absolute (ktonne CO₂e) and relative (tonne CO₂e/tonne feed produced) carbon footprints significantly over all three scopes between 2018 and 2024. This is a very positive trend – and one that we will strive to continue in the years to come. It shows a significant reduction effect caused, for example, by changes in raw material sourcing (scope 3), use of primary data, increased energy efficiency, and the use of renewable energy (scope 1 and 2). In BU LatAm, the numbers look different; due to significant business growth in Ecuador, the feed volumes grew, driving the increase in our absolute carbon footprint numbers from 2018 to 2024.

Absolute greenhouse gas emissions of BU Salmon 2024



ktonne CO₂e

Absolute carbon footprint	Scope	2018	2019	2020	2021	2022	2023	2024	Change 2018–2024	Change 2023–2024
Global average	Scope 1 and 2	220	217	196	210	216	229	143	-34.9%	-37.5%
	Scope 3	4,535	4,429	4,567	4,885	4,400	4,520	4,073	-10.2%	-9.9%
BU Asia	Scope 1 and 2	38	39	33	29	30	23	21	-44.7%	-10.2%
	Scope 3	493	549	513	544	470	492	471	-4.5%	-4.3%
BU LatAm	Scope 1 and 2	21	33	51	72	85	97	60	183.2%	-38.3%
	Scope 3	563	691	827	1,424	1,432	1,701	1,364	142.1%	-19.8%
BU MEA	Scope 1 and 2	16	15	12	14	14	12	13	-19.1%	6.6%
	Scope 3	208	210	159	180	178	203	164	-21.1%	-19.0%
BU Salmon	Scope 1 and 2	119	104	80	75	69	81	33	-72.3%	-59.5%
	Scope 3	2,850	2,565	2,665	2,343	1,981	1,789	1,749	-38.6%	-2.2%
BU Southern Europe	Scope 1 and 2	27	26	22	21	18	16	17	-36.3%	4.2%
	Scope 3	420	414	402	394	338	335	325	-22.6%	-3.0%

tonne CO₂e/tonne feed produced
(cradle to gate*)

Total carbon footprint per feed produced (Scopes 1-3)	2018	2019	2020	2021	2022	2023	2024	Change 2018–2024	Change 2023–2024
Global average	2.14	1.98	1.98	1.99	1.71	1.69	1.58	-26%	-6%
BU Asia	1.69	1.72	1.88	1.98	1.82	1.71	1.73	3%	2%
BU LatAm	1.91	1.91	1.69	2.13	1.75	1.81	1.94	2%	7%
BU MEA	2.43	2.38	1.93	2.06	1.91	2.33	1.40	-43%	-40%
BU Salmon	2.45	2.19	2.23	2.07	1.74	1.58	1.45	-41%	-8%
BU Southern Europe	1.49	1.57	1.54	1.33	1.28	1.31	1.18	-21%	-10%

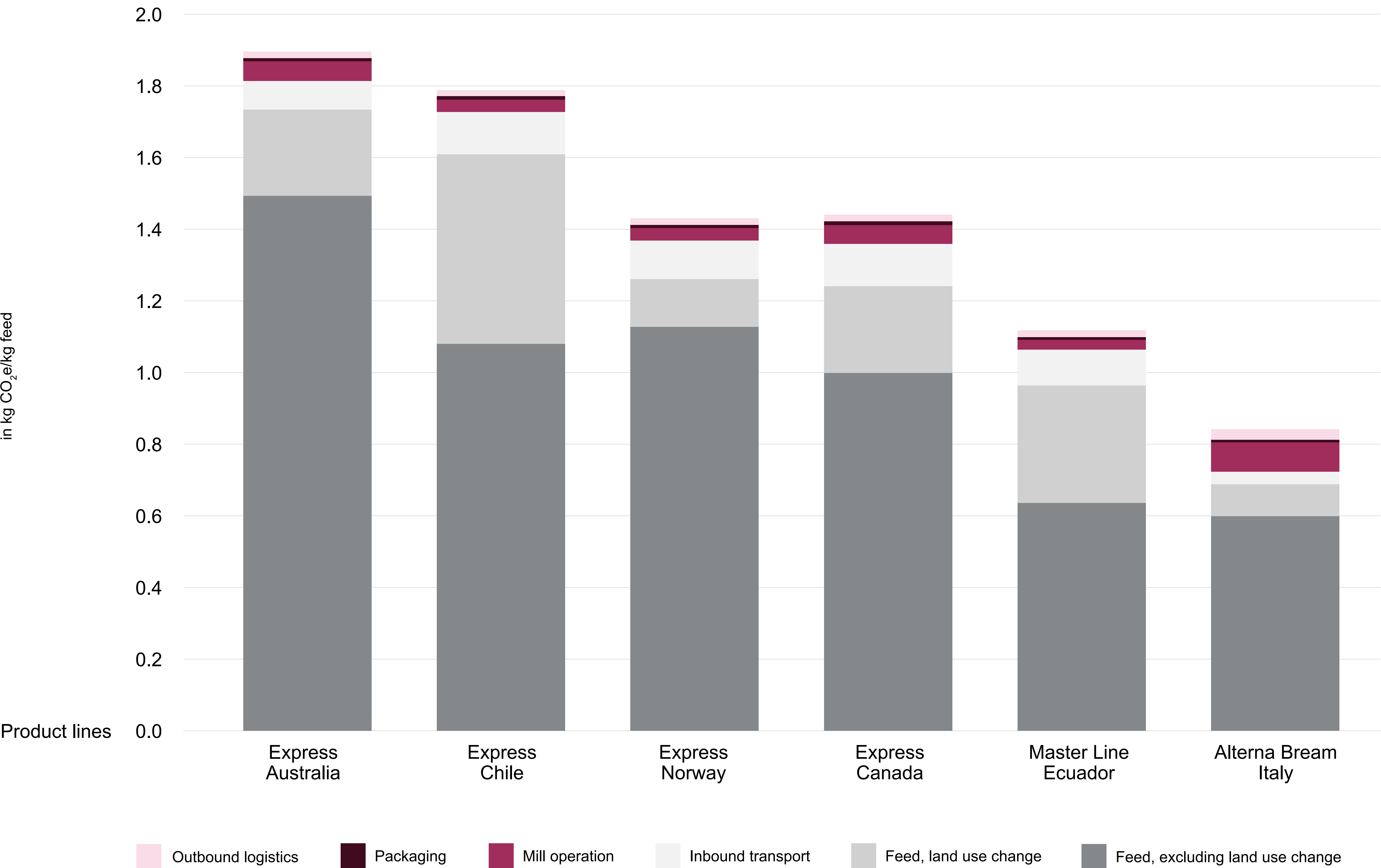
*Cradle to gate refers to a partial product life cycle assessment, from raw material extraction up to the point before the feed leaves our factories.

Reducing the carbon footprint of our products

The carbon footprint of our feed differs between species, regions, and the markets where it is produced and sold. Differences based on species are mainly due to the diverse nutritional requirements within their specific environments, which influence the types of ingredients that are needed in the feed.

The biophysical characteristics of the feed itself also have an impact, for example, in reducing feed loss and optimising feed uptake, which can further reduce the footprints of the final consumer products. In addition, purchasing and regulatory and market conditions can be quite different in the various regions and countries of the world. This impacts the feed composition, raw material availability and origins, and, subsequently, the feed footprint.

Carbon footprint breakdown from cradle to farm





Does a lower carbon footprint make for a greener future?
We discuss the challenges in reporting and aligning methodology on the next pages.

Navigating the challenges of environmental footprints

At Skretting, while we have already taken steps to reduce our footprint, this is only the beginning. To achieve our SBTi goals, we prioritise accurate and comprehensive footprint information. This data is crucial for identifying and tracking our GHG emissions across all scopes, enabling precise measurement and effective reduction strategies.

Good footprint information ensures transparency and accountability, fostering trust among our stakeholders and aligning our actions with scientific standards.

By leveraging detailed emissions data, we can make informed decisions, optimise resource use, and demonstrate genuine progress towards sustainability. Since our commitment to SBTi targets not only supports our environmental goals but also enhances our reputation as a responsible and forward-thinking company, continuous improvement in data quality is essential to our success.

A significant portion of the reductions we report in the previous sections is due to the implementation of supplier (primary) data relating to the footprint of the raw materials that we use. We implemented this data

only after it underwent stringent reviews by experts to ensure it complies with international standards. We continue to support our suppliers in improving how they measure and reduce emissions.

Over the past year, we have made significant improvements to our data collection and reporting processes. We introduced the updated emission factor database from the Global Feed Lifecycle Institute (GFLI) and added additional emission factors for primary data from our suppliers. We also improved our packaging data, enhancing the accuracy of our reporting. These changes reflect our ongoing commitment to data quality and our dedication to achieving our sustainability targets.

We will continue to improve our data and strive for the highest level of transparency. The introduction of the Forest, Land and Agriculture (FLAG) guidance from SBTi is an important step in this. Separating FLAG and non-FLAG emissions and targets provides a deeper understanding of where emissions come from and allows for the development of a clear roadmap for tangible reductions in the feed sector. One complicating factor is that, since Skretting is not a primary producer of agricultural products, we rely on data from the GFLI's

internationally recognised database for footprint data. Developing this data to align with FLAG is taking some time, but we aim to fully differentiate FLAG and non-FLAG emissions and targets in the coming year. In the meantime, we are sharing indicative FLAG/non-FLAG divisions with customers who need it ([see example in Skretting Norway](#)).

This is part of a more comprehensive process to improve our data and re-establish our commitments in line with the updated SBTi guidelines. This will also include a recalculation of our baseline. Incorporating better quality data into our baseline will show that the footprint of our feeds was initially overestimated – and we are very happy to see we are getting closer to the truth. Only with good quality data can we show actual progress.

To achieve our purpose of Feeding the Future, in the mid-to-long term, we need to consider the entire lifecycle of aquaculture products and continue to work with our customers to minimise the footprint of the full production cycle. Novel feed ingredients will play an important part in reducing the footprint of the aquaculture industry going forward.

What is FLAG?

The Science Based Targets initiative (SBTi) Forest, Land and Agriculture (FLAG) Project is the approach (including a tool and guidance) for companies in land-intensive sectors to set near-term science-based targets in line with the goals of the Paris Agreement. FLAG target timeframes are consistent with the SBTi's regular validation route; near-term targets cover a period of 5-10 years, while the net-zero target year should be 2050 or earlier.

Land-intensive sectors may be sectors that produce or source materials from forestry or agriculture, or sectors that have an impact on land-use change through their activities ([read more here](#)).

The importance of aligning our methodology across the industry

For the aquaculture industry to meaningfully reduce its total emissions, it is essential that we come together to measure our footprints using the same methodology. The Product Environmental Footprint Category rules for feed and marine fish, the GFLI, and SBTi provide very useful guidance. However, there are some choices and interpretations that we, as an industry, need to align on regarding how footprints are measured and how they can be reduced. This will enable apples-to-apples comparisons and make the footprint of different actors easy to understand and compare for our customers and consumers.

Therefore, we highly appreciate the various industry and public sector initiatives that seek to encourage open conversation and align the approach around footprint measurement. We aim for the highest possible level of transparency and look forward to continuing to collaborate with the industry to measure and reduce the environmental impact of aquaculture. We also need to carefully consider our entire impact – not just our carbon footprint and use of marine resources, but also other environmental impacts, such as land use, water use, and eutrophication, that are becoming increasingly relevant.

GHG emissions: Are the reductions real?

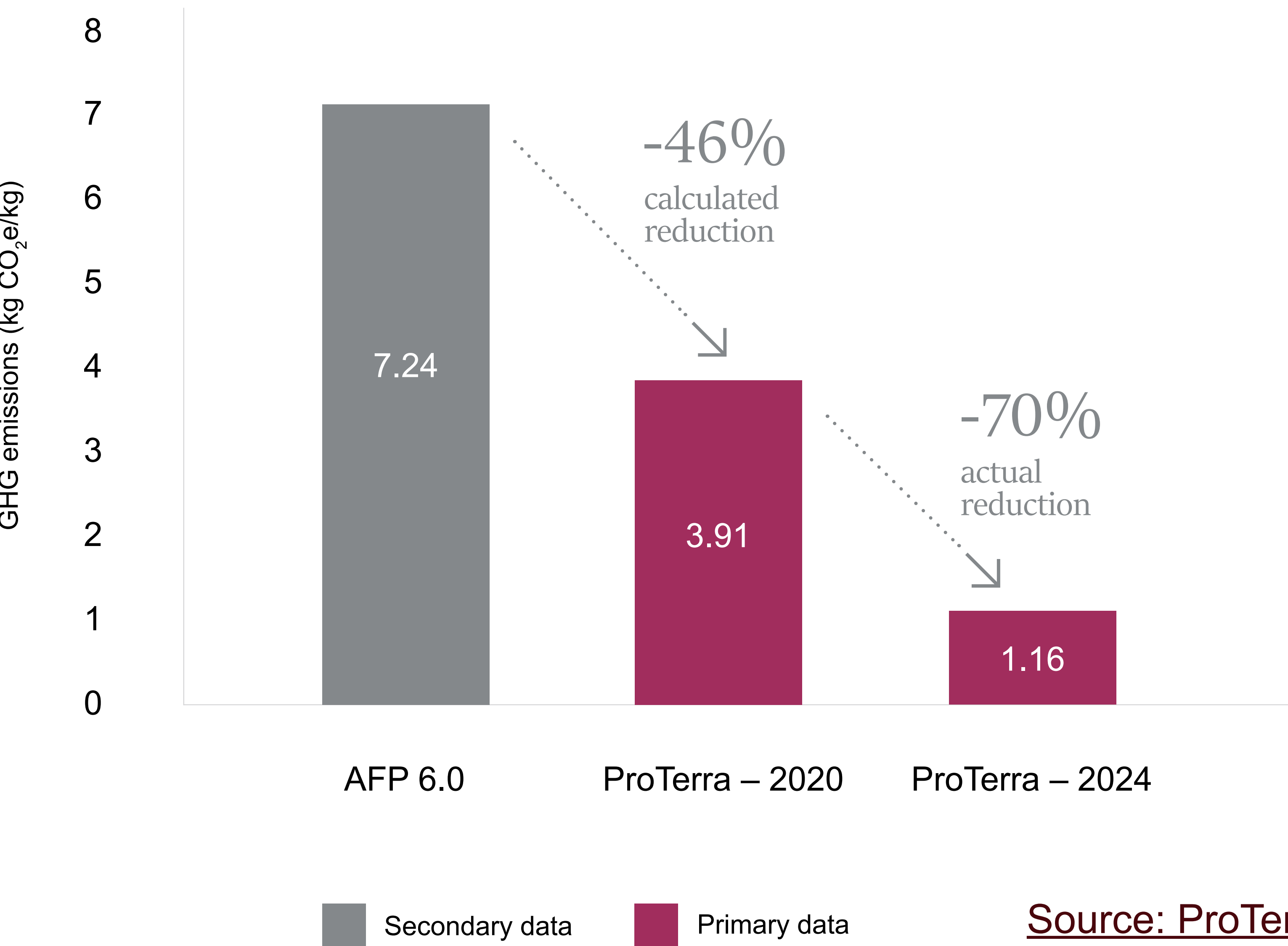
Reported reductions in GHG emissions don't always reflect an actual reduction. According to the SBTi guidelines, an actual reduction in GHG emissions must refer to a measurable decrease in emissions resulting from direct actions taken by a company. These include improvements in energy efficiency, the adoption of renewable energy sources, and process optimisations that lead to lower emissions. The reductions must be quantifiable and verifiable, ensuring that they contribute to the overall decrease in the company's carbon footprint. Measuring actual reductions is essential to demonstrate genuine progress towards climate goals.

Changes that do not qualify as actual reductions include those that are merely the result of changes in data and calculations, for example, the introduction of better data, either through the introduction of primary data from a supplier or database improvements. Changes that do qualify as actual reductions are, for example, changes to formulations or sourcing or when suppliers can show that they reduced their footprint through measurable actions, such as reducing energy or sourcing low-footprint raw materials. For even greater transparency in carbon footprint reporting, it is necessary to use the right data sources. The graph on this page represents

changes in the carbon footprint of Brazilian soy protein concentrate. Like most companies, Skretting started working with secondary data to find the hotspots in our supply chain, of which soy protein concentrate is one. Over the years, we gradually included more primary data in our calculations, which greatly improved our understanding of our supply chain. In the case of this specific soy protein concentrate, the change from secondary data to primary data in 2020 resulted in a 46% calculated reduction. However, since this reduction is due to better data and not due to an actual action to reduce GHG emissions, we cannot account for this number. If we then look at the further development of this product, we see that from 2020 to 2024, the use of updated primary data led to a further 70% reduction. Since this comes from a comparison of primary data from the same source, it can be accounted for in our GHG emission reductions.

The improved data quality between secondary data in our baseline and primary data in our later years has triggered a baseline re-calculation, which is being worked on in the coming year.

Brazilian soy protein concentrate emissions



Source: ProTerra

Main contributors to our carbon footprint by business unit

Because we produce different feeds, using different raw materials, across our various markets, the ingredients that contribute most significantly to our carbon footprint differ by BU.

In BU Asia, the primary footprint driver is vegetable protein (mainly soybean meal), followed by micro ingredients. Fish meal and carbohydrates each contribute about 10%, while fish oil and vegetable oil have a smaller impact.

In BU LatAm, which produces shrimp feed, the main footprint driver is vegetable protein (mainly soybean meal and maize distillery dry grain soluble (DDGS)), followed by carbohydrates (wheat), vegetable oils (soybean oil and lecithin), and fish meal. Animal protein (porcine blood haemoglobin) has a smaller impact, while amino acids and other micro ingredients, such as magnesium oxides, contribute minimally.

For BU MEA, the main contributors are vegetable proteins (mainly soybean meal). Micro ingredients,

including mixes of organic acids, salts, preservatives, and amino acids make a relatively large contribution compared to other BUs. Carbohydrates, such as maize grains, have a smaller impact on the footprint.

In BU Salmon, the primary contributors to the carbon footprint are vegetable proteins (mainly soy protein concentrate, wheat and maize gluten, and guar meal) and vegetable oils (mainly rapeseed oil). Micro ingredients, such as amino acids and premixes, also play a significant role. Fishmeal and animal protein (mainly poultry meal) have a smaller impact, while carbohydrates contribute even less.

And even within BU Salmon, there are notable differences between operating companies. For instance, animal protein is not used in Norway but is a key ingredient in North America and also utilised in Chile and Australia. Chile uses a higher proportion of vegetable oils, while vegetable proteins are more prevalent in Australia. Norway has a substantial share of both. The use

of micro ingredients varies widely, primarily due to differences in the use of amino acids and premixes.

For BU Southern Europe, the main contributors are vegetable proteins (mainly soy protein concentrate, wheat gluten vital, maize gluten meal, and guar meal), followed by vegetable oils (mainly rapeseed oil) and fish meal. Animal protein (poultry meal) has a smaller impact, and carbohydrates contribute even less. Micro ingredients also play a minor role.



In 2024, Skretting achieved a record decrease in GHG emissions of 37.5% or 86,000 tonnes, more than half of which resulted from our change to green electricity (scope 2 emissions). With most of our scope 2 emissions eliminated, this leaves scope 1 as the major focus of Skretting's production teams.

We are happy to report that for 2024, 95% of our electricity is purchased as green electricity. We also improved our efficiency, in terms of CO₂ekg/tonne, from 82 CO₂ekg/tonne in 2023 to 54 CO₂ekg/tonne in 2024. As we produced approximately the same volume of feed over the two years, this was a true gain in efficiency and not impacted by volume changes.

Reducing our scope 1 emissions is a priority for Nutreco's Operational Excellence (OE) team. These emissions comprise CO₂ from burning fuels, such as diesel and gas, and most originate from the boilers and heaters we use to generate steam or to heat air for cooking and drying processes. To reduce emissions, our OE team has two approaches working in parallel. The first is continuous improvement. This involves best-practice implementation and sharing and optimising our processes. We can achieve huge

saving in energy with little cost when we focus on fine-tuning every step of our processes. Our strong networking culture and collaborative way of working at Nutreco ensures we share and implement best practices across all our production sites.

For example, the process and maintenance teams Skretting-wide have been working to raise boiler feedwater temperatures, assess steam traps and improve the level of basic insulation. In Ecuador, our Maintenance and Production teams and Nutreco's global Process Excellence team have partnered with suppliers on a project to reset the dryers in our plant to the best possible condition and performance level. In China and Vietnam, our teams have been working on moisture control and dryer optimisation to reduce total energy consumption. And finally, the global Process Excellence team has shared a great deal of content on boilers, dryers and other best practices across the company.

The second approach our OE team is taking is investing in technology. Nutreco set aside an additional €10 million to support our plants in making both big and small changes that often have poor financial payback but good returns in terms of CO₂ reduction. Our operations

have completed many CO₂ reduction projects that have had an impact on our 2024 results and have more in the pipeline to be completed.

For example, our teams made boiler changes in Tasmania, Australia (from gas to electricity) and Pargua, Chile (from coal to gas). Many of our plants have made the change to electric forklifts. Skretting Spain and Norway are implementing innovative heat recovery solutions that recover the heat from extruder flash-off and dryer exhausts. In Spain, they replaced two compressors with one more efficient unit that uses heat recovery.

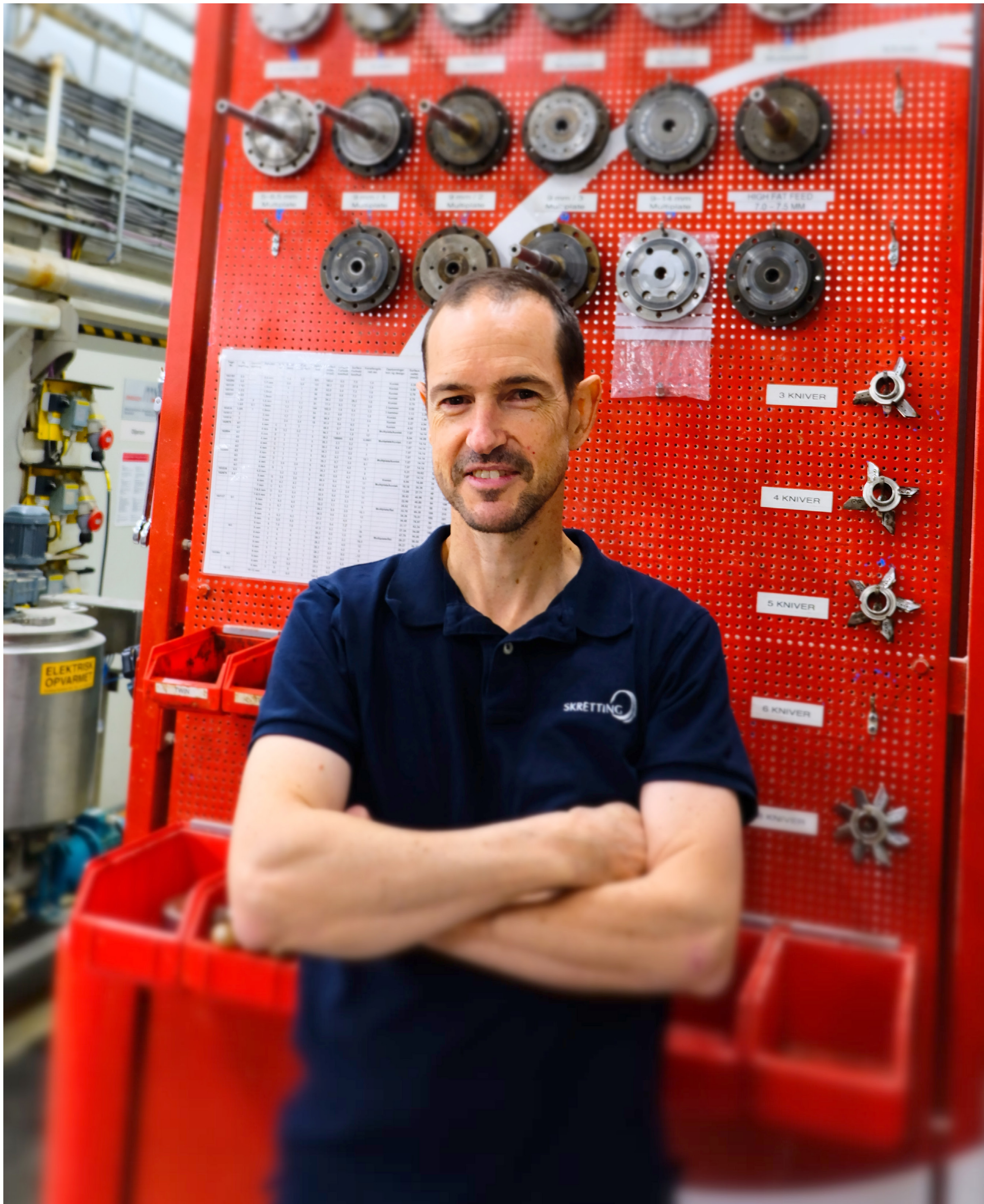
With a reduction of 50,000 tonnes of scope 1 CO₂, we showed an excellent performance in 2024. We can attribute some of that to circumstances in Ecuador, where we reduced 37,000 tonnes of CO₂ due to a lower volume of products sold. However, in addition to the volume reduction, we also reduced CO₂ emissions per tonne in Ecuador, and will be able to maintain this new lower performance into 2025 as volume increases again.

During 2024, we continued to reduce energy usage per tonne

of feed produced through our continuous improvement programs. We saw the biggest advances in our operations in Vietnam, Italy, Australia, Chile, and Egypt.

For some plants, product mix and volumes are a challenge that can hinder the great efforts of our teams to reduce emissions. For example, in Norway, we see more marine feed production, a process that demands more water and then takes more energy to dry. Some of our plants here manufacture more hatchery pellets or produce shorter runs, both of which are less efficient and require more steam and gas. The local teams are looking for new ways to overcome production challenges like these.

In 2025, we are working to further reduce CO₂ emissions through our scope 2 green energy commitment and continuous improvement programs. In addition, the investments made in 2024 into projects such as the new boilers in Australia and Canada, as well as improvements in compressed air and lowering the total moisture into the dryers in Ecuador, will contribute to lower emissions in 2025. Our teams are finding that, while there is a lot to learn and implement, the work is so rewarding that they feel very motivated to continue to improve.



Stuart Fyfe
Global Process Excellence
Leader

Reducing footprints through formulation poses challenges

Through our feed formulations, we have the flexibility to drive raw material demand by setting minimum and maximum constraints on nutrients and following raw material price and availability trends to meet these constraints as cost effectively as possible. So, when the question arose of how we can reduce the carbon footprint of our feeds, our first thought was: can we just use sustainability parameters as additional formulation constraints? But we have found that this is more difficult than we had anticipated.

The first challenge is data availability. The region that ingredients are sourced from influences their carbon footprints – one of the more tangible measures of sustainability. Therefore, to properly understand where we are today, formulators need to know where all the ingredients come from. This information isn't always immediately available, and it is often unclear whether the information we receive is really country of origin or country of manufacture. Also, datasets are limited, meaning that knowing the origin doesn't automatically mean we have the data we need, and in some cases, we need to source alternate data.

When we were finally ready to complete our first formulation exercise, the results surprised us. By setting a lower maximum carbon footprint constraint in Norwegian salmon recipes, the first thing that happened was vegetable proteins and oils were replaced with fish meal and fish oil. This is because, for many ingredients, a large proportion of the carbon footprint comes from the associated land use change – and there is no land use change assigned to marine ingredients. Using marine ingredients went against Skretting Aquaculture Innovation's 35-year focus on reducing reliance on these resources and opened up a discussion on the definition of sustainability.

In theory, the switch to marine ingredients appears to be a sustainable change, since it reduces the carbon footprint. But, in reality, increasing the inclusion of fish meal and fish oil is not possible, as quantities of these ingredients have remained static or declined, and prices are volatile. This means that, with the data we have today, we cannot achieve a realistic and long-term reduction by only looking at formulations. We need to approach the challenge cross-functionally.

By working with suppliers for key ingredients, such as soy, we can preferentially source our raw materials from regions that make a concentrated effort to increase sustainability through, for example, reducing deforestation. Doing so gives us better and lower carbon footprint values, without having to change our recipes – although it is important to be aware that just using more accurate data cannot always be considered a reduction. We, together with our suppliers, need to make actual changes to lower the footprint of our ingredients.

There is also the issue of balancing cost with sustainability. For example, the use of land animal products (LAPs) can have a positive impact on the carbon footprint. However, in many markets, we are already reaching the maximum possible inclusion of LAPs considering their cost effectiveness, and there is no room to further reduce CO₂e by increasing their usage in our formulations. The sustainability of LAPs can also be a great point to support us in getting these raw materials into markets where we encounter consumer reluctance. But the focus on improving the sustainability data quality of

vegetable proteins and using this to ultimately work with and select suppliers to reduce the footprint of these materials means that the CO₂e numbers for some vegetable and LAPs are getting closer together and weakening the story. Putting the same focus on reducing the footprint of LAPs will likely change this.

As mentioned, there are still large gaps in the data we have today – for LAPs, for instance, we have only very generic and global values. Once we have more complete data sets and primary data, we can really start to complete advanced formulation scenarios with better accuracy. In the future, we could make smarter decisions as to what raw materials we buy to support our sustainability goals or just select regions to buy raw materials from by balancing cost and carbon footprint.



Samuel Eggington
Global Formulation Manager

Engaging suppliers to improve reporting

To show that we are reducing our environmental footprint, we need good quality primary data from our suppliers to complete life cycle assessments (LCAs). During 2024, we worked together with the Nutreco Procurement team to reach out and request this data from our supply chain. Multiple suppliers have taken action to perform product LCAs and are able to show the actual impacts involved in creating these ingredients. However, we see that the presence of LCA data is variable; it is overrepresented on the micro ingredient side compared to macro ingredients. This means that we are able to report on many of our vitamin, amino acid and mineral footprints, but are still lacking data on the large commodities, such as soy, wheat and rape seed.

We also request that our suppliers join the SBTi so that their targets are aligned with ours. Below is an overview of total volumes sourced from suppliers that are committed to SBTi.

Skretting suppliers committed to SBTi (by volume)	
	Committed
BU Asia	14%
BU LatAm (Aquaculture)	39%
BU MEA	7%
BU Salmon	12%
BU Southern Europe	9%
Total	20%

In our Sustainability RoadMap 2025, we committed to making 100% of our packaging recyclable, reusable or compostable. In recent years, we replaced several packaging types to meet this target, and are communicating on our progress for the first time in this Impact Report.

To make this target measurable, we mapped all our packaging items (around 1,200 in total for Skretting worldwide) following the official RecyClass system, under which every individual packaging item receives a score from A to F related to the recyclability of the material.

Mapping for primary packaging items:

Class A and B: Easily recyclable

Class C: Only recyclable after separating paper and plastic (liner)

Class D: Not fully recyclable; construction of packaging defined by regulations for dangerous goods

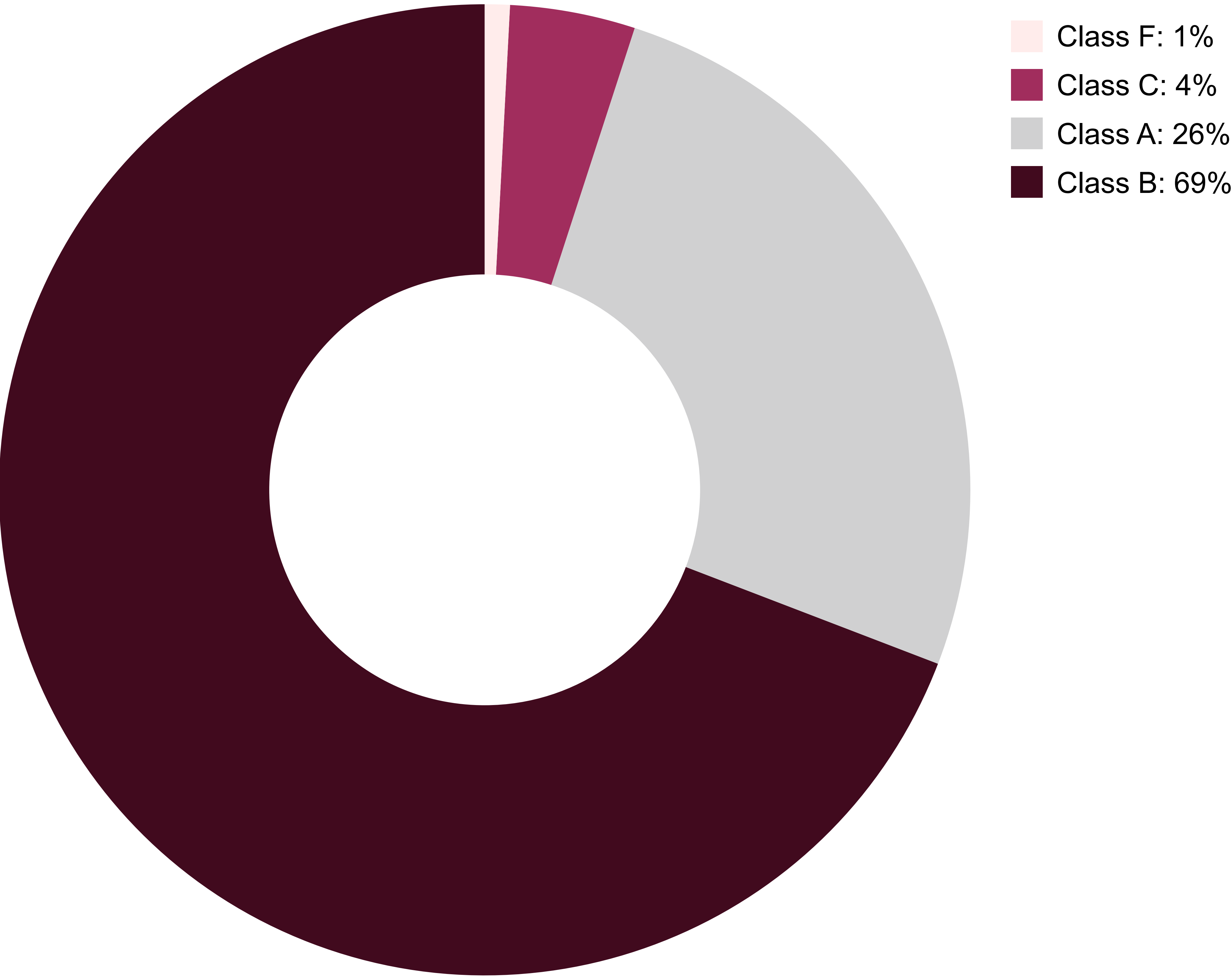
Class F: Not recyclable

We are pleased to report we are close to the finish line for our Skretting packaging portfolio, having achieved a score of 95% in RecyClass A and B.

For the remaining 5% of our packaging materials that are class C and F, we need to find alternative solutions. Items in class F are mainly packaging of products that require a very high moisture barrier (such as aluminium) and, in category C, mostly consist of paper bags with a plastic liner inside.

In the coming years, we will investigate how we can further improve the sustainability of our packaging – mainly by reducing the overall amount of material (plastic) used.

Skretting packaging mapped to RecyClass system



Chapter 3

Good citizenship



At Skretting, we believe that respect for people is fundamental to ethical business practices. We strive to create a workplace environment where everyone feels seen and heard, through a strong commitment to diversity and inclusion. That is why one of our targets is to have 30% women in senior leadership positions by 2025.

We also extend our responsibility outside of our business, and actively engage with our suppliers to address human rights issues, promoting fair labour practices and ensuring sustainable sourcing.

To strengthen this commitment, we have implemented EcoVadis, a globally recognised human rights risk rating system and sustainability assessment platform, to evaluate suppliers and promote ethical sourcing. This approach helps us uphold our values, mitigate risks, and contribute to a more sustainable and equitable supply chain.

Target

30% women in senior leadership

2024 progress

27%

Target

Implement human rights risk rating system

2024 progress

Implemented EcoVadis

Our ambition is to be the preferred employer of choice, which is why building a diverse workforce and inclusive culture is a priority for our organisation. In 2024, a group of our top managers participated in an Inclusive Leadership program. As part of the program, they underwent comprehensive evaluations from managers, direct reports, peers and other relevant colleagues to help us understand how our global and local managers are perceived by others of diverse backgrounds and identify potential blind spots and development opportunities to ensure we can nurture an environment for people to develop and thrive.

Diversity and inclusion

	Number of employees	% female hired YTD	% female in senior leadership	Number of nationalities	Average age
BU Asia	1,523	25%	28%	26	38
BU LatAm	961	30%	35%	10	36
BU MEA	542	0%	20%	28	38
BU Salmon	1,006	14%	21%	37	42
BU Southern Europe	397	50%	14%	15	43
Corporate	153	43%	45%	27	39
Global	4,582	27%	27%	74	39



Better together:
Skretting's Diversity & Inclusion Council helps create an environment of joy, celebration, and shared experiences. Read more on the next page.

Ensuring employees feel respected, valued, supported and empowered

Diversity and inclusion (D&I) initiatives in the workplace protect a fundamental human right: equality in dignity and rights. They are also deeply intertwined with the United Nation’s 2030 Agenda for Sustainable Development, as they aim to enhance the well-being of people during their working hours, which represent roughly one-third of each person’s life. In addition, these initiatives promote gender equality, ensure justice in the workplace, open opportunities for immigrant workers, and nurture a sense of belonging for both visible and invisible minorities.

This is particularly important to Skretting, as its workforce is spread globally. Our 4,582 employees have an average age of 39 years. In 2024, 27% of new hires were female, which is the roughly the same percentage of women currently in positions of senior leadership. Under these circumstances, how do we elevate our position using the framework of D&I?

Skretting’s D&I Council is a team of nine people: six of them representing different Skretting teams in Norway; and three additional members representing Skretting China, Ecuador, and Chile. The D&I Council has been working together since June 2024,

and one of its members served in past iterations of the council that have been active since 2020.

The team made a great deal of progress advancing D&I across Skretting in 2024. They developed a calendar covering various topics and celebrations important to cultures around Skretting, to help guide our focus during the year.

In 2024, one of our priorities was to encourage a healthy feedback culture. To support this initiative, the D&I Council organised the online seminar “Feedback Across Cultures.” This event highlighted both the challenges and opportunities of a multicultural workplace in shaping effective feedback.

The D&I Council is focused on addressing equality, which means not only organising activities that resonate with most – if not all colleagues – but that also involve the less visible and more vulnerable members of the Skretting community. For instance, they organised the first delegation to attend the local 2024 Pride Parade in Rogaland, Norway. While homosexuality was decriminalised in Norway just over 50 years ago, our company is 125 years old. And even today, some members of our workforce and

other stakeholders outside Norway function in societies that continue to either stigmatise or criminalise homosexuality. This event raised awareness of the legal, social and personal challenges that colleagues from the past and present face. As an example of allyship, it serves as a model for supporting other vulnerable groups within the Skretting community.

The D&I Council wants to help create an environment of joy, celebration, and shared experiences. During our week-long D&I Week, we fostered an environment that brings people together. All colleagues were invited to wear their national dress, and the cafeteria staff prepared food representing all the continents. We also organised a Cultural Fair, where teams prepared exhibits to share highlights of their respective cultures.

We are always open to supporting activities proposed by our colleagues across the company. For example, colleagues from Vietnam, Singapore, and China organised a Lunar New Year celebration, offering tea, poetry, and a lecture on how differently the Lunar New Year is celebrated in every country.

As Skretting places a strong focus on inclusivity, 2025 will be an exciting year for us. Our top management teams have expressed their interest in a closer relationship with the D&I Council. This newfound support aligns with our mission of strengthening the institutionalisation of the D&I Council, so that Skretting workers know that they have a dedicated team of people advocating for their well-being, sense of belonging, and fair treatment.

Supporting suppliers in improving sustainability

We rely on our suppliers to make responsible choices as much as our customers rely on us to do the same. In 2024, we remained dedicated to supporting suppliers as they worked to achieve higher sustainability standards.

A key component of our approach is our partnership with EcoVadis, a globally recognised sustainability rating platform. Through the platform, we assess and monitor the sustainability performance of our suppliers across four key areas: environment, labour and human rights, ethics, and sustainable procurement. The comprehensive EcoVadis evaluation allows us to gain valuable insights into our suppliers' sustainability practices and benchmark their performance against industry standards.

Throughout the year, we sourced 2.5 million tonnes of ingredients through more than 1,000 suppliers globally. A total of 28% of our volumes are purchased through suppliers that have conducted an EcoVadis Rating assessment,

which greatly helps us perform our due diligence, both for regulatory requirements and for Aquaculture Stewardship Council (ASC) certification. During the year, we identified five suppliers, representing 0.2% of our volume, that show insufficient performance on the four categories assessed. These suppliers are primarily micro ingredient suppliers from which we occasionally source minor volumes. We will engage with these suppliers to understand their low performance better and to identify whether further action is required.

In 2024, we remained dedicated to supporting suppliers as they worked to achieve higher sustainability standards.



Our purpose, Feeding the Future, is more than just a concept. In the Middle East and Africa, Feeding the Future has millions of faces and names. One of those is Seun, a single mother of four.

Through Nutreco’s Catfish Sustainability Project, we collaborate with a local NGO, the Justice Development and Peace Commission, to offer technical training, advisory services, and input support to communities of farmers. More than feed, fish, and income, the project fosters hope and dignity.

A few years ago, Seun relocated her family to the agriculture-rich state of Oyo in Nigeria, where she discovered fish farming as a source of income. Despite having no previous experience in agriculture, Seun wanted to excel. She joined a local project with a group of farmers with similar histories – they became her mentors.

In the beginning, Seun had a few fish in a small pond. She currently pilots an operation of three large ponds, enabling her to increase her profits.

Seun and her family's case is one of many. In Nigeria, we have been strengthening customer intimacy by training more than 1,300 farmers to sustainably farm catfish through this project.

As a devoted mother seeking financial stability after her relocation, Seun is grateful for the opportunities provided by the project. This thriving fish business inspires both a mother's and her children's dreams. Seun plans to establish a fish empire that cultivates catfish from hatchery to adulthood, showcasing the impact of sustainable farming on individual lives and communities.

In the Middle East and Africa, Feeding the Future has millions of faces and names.



Seun is a single mother of four living in Oyo, Nigeria.

Chapter 4

Our ingredients



Inclusion of different nutrients in Skretting feed

At Skretting we use many different raw materials. These mainly originate from animal sources (such as fish meal and poultry meal) and vegetable sources (such as wheat and soybeans). In addition, we use several micro-ingredients, such as vitamins and minerals, to meet the full nutritional needs of fish and shrimp.

The table on this page shows a full breakdown of the raw materials used across the globe.

Inclusion of different nutrients in Skretting feed

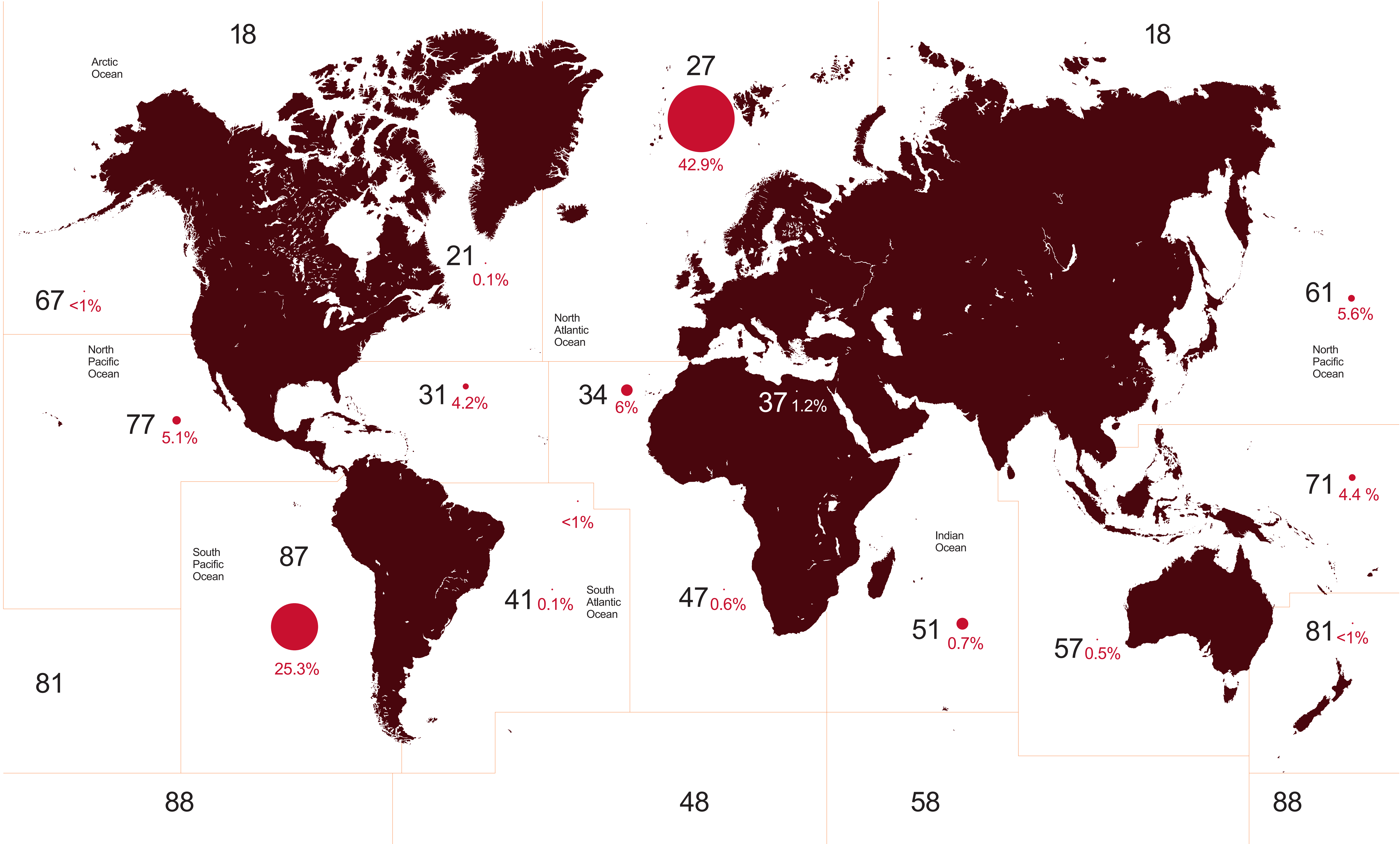
This table gives an overview of the ingredients included in Skretting feeds, together with averaged inclusion percentages.

	Primary raw material	Ingredient group	Typical examples	Salmon	Seabass and sea bream	Shrimp	Tilapia	Average Skretting
				Average % inclusion in feed				
Protein	Wild capture and farmed fish and crustaceans	Marine proteins	Fishmeal and crustacean meal	11.1	16.9	9.0	0.7	10.7
	By-products from farmed land animals	Land animal proteins	Poultry meal	8.7	22.7	4.7	9.6	8.9
	Agricultural crops	Vegetable proteins	Wheat gluten, corn gluten, soybean meal, soy protein concentrate, rapeseed meal, sunflower meal, lupin faba	39.5	27.3	46.8	35.2	40.7
Fat	Wild capture and farmed fish and crustaceans	Fish oil	Fish oil	11.6	8.1	1.4	0.1	7.0
	Agricultural crops	Vegetable oil	Rapeseed oil, soybean oil, camelina oil	17.6	5.8	2.6	0.1	10.1
	By-products from farmed land animals	Land animal oils	Poultry oil	0.9	1.2	0.0	0.0	0.6
Carbohydrates	Agricultural crops	Starch raw materials	Wheat	8.5	17.2	28.7	47.4	18.1
Micronutrients	Various	Vitamins, minerals, pigments	Vitamin premixes, mineral premixes, pigments	2.2	0.8	6.8	6.8	4.0

Marine ingredients from whole fish

FAO fishing area	Code	%
Atlantic, Northeast	27	42.9
Pacific, Southeast	87	25.3
Atlantic, Eastern Central	34	6.0
Pacific, Northwest	61	5.6
Pacific, Eastern Central	77	5.1
Pacific, Western Central	71	4.4
Atlantic, Western Central	31	4.2
Mediterranean and Black Sea	37	1.2
Indian Ocean, Western	51	0.7
Atlantic, Southeast	47	0.6
Indian Ocean, Eastern	57	0.5
Atlantic, Northwest	21	0.1
Atlantic, Southwest	41	0.1
-	Not identified	3.3
Grand Total		100.0

Volumes of whole fish (%) sourced per FAO fishing area



Marine ingredients from whole fish

At Skretting, we believe that marine ingredients originating from reduction fisheries (made from whole fish) must have the strictest sustainability sourcing criteria. This is because the aquafeed industry is by far the most important sector buying marine ingredients and is positioned to exercise significant purchasing power.

In 2024, a total of 29 species made up 95% of marine ingredients originating from whole fish that Skretting purchased. The most important species are small pelagic fishes from the Pacific Southeast, Atlantic Northeast and Atlantic Eastern Central fishing areas. Small pelagic fisheries are the most important source for both fishmeal and fish oil. The remaining 5% originates from an additional 40 species.

There are several reasons for the relatively large number of species registered. In all fisheries, there is a certain amount of bycatch. When the bycatch is at low levels, it is part of the legal fishery. In some

areas, the manufacturers of marine ingredients are instructed by law to register all bycatch. This means that when Skretting receives a consignment of marine ingredients, more than 10 species will be declared that might only constitute a small percentage of the delivery.

Another factor is that many fisheries are multi-species fisheries, especially in tropical areas where we find large species diversity and where single-species fisheries are uncommon. It can also be difficult to correctly identify all fisheries in a detailed way. For example, while our suppliers can often declare that the origin of a marine ingredient is anchovy or sardine, there are many different anchovy and sardine species, which can make it challenging to identify the specific fishery. This is something we want to address through new pilot initiatives, including our engagement with the Global Dialogue on Seafood Traceability (GDST).

	Species	Latin name	Fishmeal	Fish oil	FAO main fishing area
1	Blue whiting	<i>Micromesistius poutassou</i>	25.6%	10.7%	27
2	Anchovy	<i>Engraulidae</i>	14.3%	4.1%	87, 61, 77, 31, 34, 87, 47, 37, 51
3	Sprat	<i>Sprattus sprattus</i>	9.3%	11.2%	27
4	Sardine	<i>Sardinella spp</i>	7.7%	4.2%	87, 51, 61, 34, 77, 31, 47
5	European pilchard	<i>Sardina pilchardus</i>	4.4%	0.9%	34, 47
6	Menhaden	<i>Brevoortia spp</i>	4.3%		31
7	Chub mackerel	<i>Scomber japonicus</i>	3.3%	8.6%	87, 77, 34, 47
8	Pacific thread herring	<i>Opisthonema libertate</i>	3.1%	3.3%	87, 77
9	Herring	<i>Clupea spp</i>	3.0%	2.4%	27
10	Frigate tuna	<i>Auxis thazard</i>	2.7%	1.1%	87
11	Sandeel	<i>Ammodytes tobianus</i>	2.7%	3.6%	27
12	Pacific anchoveta	<i>Cetengraulis mysticetus</i>	2.7%	1.4%	87
13	Peruvian anchoveta	<i>Engraulis ringens</i>	2.5%	5.5%	87
14	Araucanian herring	<i>Strangomera bentincki</i>	1.8%	5.1%	87
15	Mackerel	<i>Scombridae spp</i>	1.8%		27, 51, 34, 87
16	Jackmackerel	<i>Trachurus symmetricus</i>	1.7%	6.2%	87
17	Common searobin	<i>Prionotus carolinus</i>	1.3%		27
18	North Sea herring	<i>Clupea harengus</i>	1.0%		27
19	Boarfish	<i>Capros aper</i>	0.8%		27
20	Greater lizardfish	<i>Saurida tumbil</i>	0.6%		71
21	Unicorn leatherjacket	<i>Aluterus monoceros</i>	0.5%		71
22	Shrimp		0.5%		27, 61
23	Atlantic salmon	<i>Salmo salar</i>		1.6%	Farmed
24	Gulf menhaden	<i>Brevoortia patronus</i>		6.2%	31
25	Japanese anchovy	<i>Engraulis japonicus</i>		13.8%	61
26	Japanese pilchard	<i>Sardinops melanostictus</i>		2.0%	61
27	Norway pout	<i>Trisopterus esmarkii</i>		0.9%	27
28	Pollock	<i>Pollachius virens</i>		2.5%	67
29	Other (< 5% of total))		4.5%	4.8%	
	Total		100.0%	100.0	

Marine ingredients originating from trimmings

The processing of fish for human consumption gives rise to a byproduct that is not used in the final seafood product. These offcuts generated after processing are valuable as a raw material from which fishmeal and fish oil are often produced. Roughly one-third of fishmeal produced is made from seafood byproducts from fish for human consumption. The use of byproducts is increasing as more whole fish are used for direct human consumption, and society becomes more successful at collecting the material and fuelling the bioeconomy.

We have mapped the origin of marine ingredients in Skretting that come from byproducts. In 2024, it was 40%, up from the average over the last six years of 35%. Also, byproducts originating from aquaculture are becoming an important source used for marine ingredient production.

Our data are in line with estimates suggesting that globally around 30-35% of fishmeal and fish oil production is derived from byproducts, including fish heads, bones, skin and internal organs from fish processed for human consumption. In some regions, such as Europe, the proportion is even higher, with byproducts accounting for up to 50% or more of marine ingredients. This trend is growing as the industry seeks to maximise resource efficiency and sustainability by reducing waste.

Year	Whole fish	Trimmings
2018	74	26
2019	71	29
2020	57	43
2021	63	37
2022	61	39
2023	66	34
2024	60	40
Average	65	35



Tracking the fisheries of origin for byproduct ingredients

A total of 46 species made up 95% of the marine ingredients originating from byproducts (trimmings) that Skretting purchased in 2024. Several additional species of fish are registered as the origin of fishmeal and fish oil from byproducts (trimmings) in low volumes (< 5%).

The species registered as the origin of marine ingredients from trimmings come from fisheries that produce fish important to human consumption, including hake, cod, pollock and different mackerel. We also see trimmings from small pelagic fishes, including anchovy, sardines, and sprat. Using marine ingredients from different tuna species for feed is common, due to the abundance of byproducts produced by the tuna canning industry.

Marine ingredients from farmed species such as Atlantic salmon are also important. In 2024, Atlantic

salmon was the most important source of fish oil originating from trimmings, and a common source of fish oil in the diet of many farmed marine species.

While we cannot establish with 100% certainty that the FAO fishing area for each species is the origin of the marine ingredients from byproducts because the country of processing (country of origin) might be different from where the original catch was landed, we are actively working with suppliers to improve the data quality.



Tracking the fisheries of origin for byproduct ingredients

	Species	Latin name	Fishmeal	Fish oil	FAO Main Fishing Area
1	Skipjack tuna	<i>Katsuwonus pelamis</i>	31.3%	1.9%	87, 77, 27
2	Yellowfin tuna	<i>Thunnus albacares</i>	11.4%		27, 87, 77
3	Herring	<i>Clupea spp</i>	9.3%	17.8%	27
4	Mackerel	<i>Scombridae spp</i>	9.0%	12.2%	27, 87
5	Sardine	<i>Sardinella spp</i>	5.8%	2.5%	27, 61
6	North Sea herring	<i>Clupea harengus</i>	4.6%	13.0%	27
7	Jackmackerel	<i>Trachurus symmetricus</i>	4.4%	4.0%	87
8	Chub mackerel	<i>Scomber japonicus</i>	3.8%	2.5%	87, 61, 77, 34
9	European pichard	<i>Sardina Pilchardus</i>	2.8%	2.7%	34, 27, 47
10	Peruvian anchoveta	<i>Engraulis ringens</i>	1.9%	0.3%	87
11	Squid		1.4%		87, 61, 27
12	Albacore	<i>Thunnus alalunga</i>	1.4%	0.3%	27, 71
13	Blue whiting	<i>Micromesistius poutassou</i>	1.3%	0.6%	27
14	Hake	<i>Merluccius spp</i>	1.1%	0.6%	27
15	Frigate tuna	<i>Auxis thazard</i>	0.8%	0.1%	27, 87
16	Cod	<i>Gadus morhua</i>	0.7%	1.3%	27
17	Splendid ponyfish	<i>Leiognathus splendens</i>	0.7%		71
18	Shortfin scad	<i>Decapterus macrosoma</i>	0.6%		87
19	Anchovy	<i>Engraulidae</i>		0.3%	27, 47
20	Atlantic salmon	<i>Salmo salar</i>		20.5%	Farmed
21	Baltic sprat	<i>Sprattus sprattus</i>		0.4%	27
22	Bigeye tuna	<i>Thunnus obesus</i>		0.1%	87
23	Bullet tuna	<i>Auxis rochei</i>		0.1%	87

24	Capelin	<i>Mallotus villosus</i>		0.9%	27
25	Catfish	<i>Silurus spp</i>		0.1%	Farmed
26	Coho salmon	<i>Oncorhynchus kisutch</i>		1.9%	Farmed
27	Common dolphinfish	<i>Coryphaena hippurus</i>		0.0%	87
28	Common searobin	<i>Prionotus carolinus</i>		0.0%	87
29	English mackerel	<i>Scomber australasicus</i>		0.0%	27
30	Haddock	<i>Melanogrammus aeglefinus</i>		0.2%	27
31	Halibut	<i>Hippoglossus hippoglossus</i>		0.2%	27
32	Horse mackerel	<i>Trachurus spp</i>		0.0%	27
33	Japanese anchovy	<i>Engraulis japonicus</i>		0.0%	61
34	Japanese pilchard	<i>Sardinops melanostictus</i>		0.0%	34, 47
35	Mackerel	<i>Scomber spp</i>		0.0%	27, 87
36	Mote sculpin	<i>Normanichthys crockeri</i>		0.0%	87
37	Norway pout	<i>Trisopterus esmarkii</i>		0.2%	27
38	Pacific anchoveta	<i>Cetengraulis mysticetus</i>		0.1%	87
39	Pacific bumper	<i>Chloroscombrus orqueta</i>		0.1%	87
40	Pacific thread herring	<i>Opisthonema libertate</i>		0.4%	87, 77
41	Plaice	<i>Pleuronectes platessa</i>		0.3%	27
42	Pollock	<i>Pollachius virens</i>		3.7%	67
43	Rainbow trout	<i>Oncorhynchus mykiss</i>		1.3%	Farmed
44	Saithe	<i>Pollachius virens</i>		0.6%	27
46	Shortjaw leatherjacket	<i>Oligoplites refulgens</i>		0.0%	87
	Other		2.8%	4.8%	
	Miscellaneous		4.7%	4.1%	
	Total		100.0%	100.0%	

Disclosing our forage fish dependency ratio (FFDR) and fish in fish out ratio (FIFO)

Fishmeal and fish oil from wild fish are finite resources that are shared across a range of increasingly demanding users – from direct human consumption to aquaculture to pig and poultry production. At Skretting, we promote the efficient use of these resources, working to enable the production of larger amounts of farmed fish and crustaceans using the same amount of fishmeal and fish oil.

The use of wild fish in aquaculture in the form of fishmeal and fish oil is expressed as the FFDR. Marine ingredients originating from trimmings are not considered in this calculation. The FFDR is calculated as the amount of wild-caught fish used to produce the volume of fishmeal and fish oil required to produce one kilogram of farmed fish.

The exact FFDR will be dependent on:

- The amount of marine ingredients in the feed
- The amount of marine ingredients originating from whole fish
- The economic feed conversion factor eFCR

The FFDR Feed represents the amount of forage fish used to produce one kilogram of feed. FFDR feed multiplied with the economic feed conversion ratio (eFCR) is equal to FFDR fish. FFDR fish shows the amount of forage fish used to produce 1 kg of fish. The FFDR is further divided into the FFDRm for fish meal and FFDRo for fish oil.

In our disclosure in this section, we have also included the calculation of FIFO as defined by [Jackson \(2009\)](#), who argues that the FIFO calculation gives a more accurate number when considering the total usage of fishmeal and fish oil.

Skretting global averages	Salmon				Sebass & sea bream				Shrimp						Tilapia			
	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023 Asia	2024 Asia	2023 LatAm	2024 LatAm	2021	2022	2023	2024
FFDRm feed	0,37	0,40	0,38	0,34	0,46	0,54	0,46	0,39	0,23	0,24	0,43	0,51	0,23	0,16	0,04	0,01	0,03	0,01
FFDRo feed	1,46	1,40	1,59	1,47	0,54	0,19	0,71	0,32	0,03	0,00	0,00	0,04	0,25	0,16	0,05	0,00	0,01	0,01
eFCR	1,3	1,3	1,3	1,3	1,8	1,8	1,8	1,8	1,5	1,5	1,5	1,5	1,5	1,5	2,0	2,0	2,0	2,0
FFDRm fish	0,48	0,52	0,49	0,45	0,81	0,95	0,81	0,68	0,35	0,36	0,65	0,77	0,35	0,24	0,08	0,02	0,06	0,02
FFDRo fish	1,90	1,82	2,06	1,91	0,94	0,32	1,24	0,57	0,05	0,00	0,00	0,06	0,38	0,24	0,10	0,00	0,02	0,01
FIFO	0,56	0,58	0,58	0,54	0,47	0,48	0,50	0,38	0,21	0,20	0,36	0,43	0,21	0,16	0,01	0,00	0,01	0,01

Calculation FFDR:
FFDRm = (forage fishmeal in feed % * eFCR) / 24
FFDRo = (forage fish oil in feed % * eFCR) / 5%

Calculation FIFO:
FIFO = (forage fishmeal in feed % * eFCR) / 24%

Economic Feed Conversion (FCRe) are averages based on inhouse estimates.

To protect the ocean and ensure that fish stocks caught for direct or indirect human consumption are fished within clearly defined, sustainable limits, Nutreco and Skretting published a [Marine Ingredients Responsible Sourcing Policy](#) in 2022.

In line with Nutreco’s sustainability RoadMap 2025, we strive to ensure that our marine feed ingredients come from sustainable sources in the short and long term and that all the fishmeal and fish oil that we use originates from fisheries that are managed according to the FAO Code of Conduct for Responsible Fisheries. In practical terms, we have defined different sustainability classes for the main groups of marine ingredients (whole fish, byproducts from wild fish and byproducts from aquaculture). For details on the different sustainability classes, please consult our sourcing policy.

Whole fish

Sustainability class	Target	2022	2023	2024
Sustainability class A+ and A	85%	68%	52%	51%
Sustainability class A-	Maximum 15%	16%	24%	31%
Class B or C		16%	24%	17%

Byproducts wild fish

Sustainability class	Target	2022	2023	2024
Sustainability class A+ and A	50%	81%	72%	89%
Sustainability class A-	50%	4%	5%	5%
Class B or C		15%	23%	6%

Byproducts aquaculture

Sustainability class	Target	2022	2023	2024
Sustainability class A+ and A	50%			100%
Sustainability class A-				

In 2024, 51% of marine ingredients from whole fish originated from the MarinTrust programme or were Marine Stewardship Council (MSC) certified. In 2023, we experienced the full impact of several important fisheries (blue whiting, Atlantic herring and Atlantic mackerel) losing their MSC certification, resulting in the share of whole fish originating from FIPs increasing to 31%. This is partly because an important fishery for blue whiting changed its status from being a certified fishery to entering an FIP. Other significant fisheries have not yet been able to complete the improvement project and enter certification. A high share of the trimmings from wild fish that we use – 89% – came from certified sources.

The developments described above are creating challenges for Skretting in reaching our targets. Certification of local fisheries is lacking in the areas where we operate – especially in Latin America, Asia and Africa – as a result of low awareness around certification programmes in these areas and less pressure from the markets to certify these fisheries.

However, we’re actively engaging with stakeholders to address this situation.

Fisheries in sub-tropical and tropical areas are more complex to manage; they are often multi-species fisheries where it is resource-intensive to gather scientific data and not always possible to use the same principles used to manage single-species fisheries. This makes certification more difficult and demanding.

We are well on track to meet our targets related to sourcing byproducts from wild fish and aquaculture. The main challenge in this area is that detailed information on the origin of trimmings from wild fish is often missing or of poor quality.

Certified or FIP	Skretting total	BU Asia	BU LatAm	BU MEA	BU Salmon	BU Southern Europe
Total	84.7	58.6	88.0	67.9	90.7	80.4
Whole fish	48.4	28.6	37.4	4.1	61.4	29.4
Trimmings	36.3	30.0	50.6	63.8	29.3	51.0
Certification details (of total)						
MSC certified	17.3	0.1			30.6	2.1
Whole fish	8.8	0.1			15.4	1.2
Trimmings	8.5				15.1	0.9
MarinTrust certified	47.0	43.9	52.6	67.9	37.3	76.1
Whole fish	21.1	18.0	2.4	4.1	25.1	26.5
Trimmings	25.9	25.9	50.2	63.8	12.2	49.6
MarinTrust FIP	17.6	14.7	26.6		20.2	2.0
Whole fish	16.8	10.5	26.3		20.0	1.5
Trimmings	0.8	4.1	0.3		0.2	0.5
Comprehensive FIP	2.0	0.0	8.7		1.2	0.0
Whole fish	1.6	0.0	8.7		0.5	0.0
Trimmings	0.4		0.1		0.6	
ITM (FIP)	0.8				1.4	0.1
Whole fish	0.2				0.3	0.1
Trimmings	0.6				1.1	0.0
None	11.6	28.4	12.0	24.8	6.7	15.6
Whole fish	8.7	25.3	10.4	22.3	5.9	4.3
Trimmings	2.8	3.1	1.6	2.5	0.7	11.3
No information	3.7	12.9		7.4	2.7	4.0

Addressing the urgent case of blue whiting

Blue whiting has long been a cornerstone of marine ingredient supply for European aquaculture. In recent years, nearly half of the fishmeal produced in Northern Europe has relied on this species. However, its sustainability is now at serious risk. In 2021, the blue whiting fishery lost its Marine Stewardship Council (MSC) certification due to overfishing – the outcome of uncoordinated quota setting among key coastal states. Without corrective action, blue whiting may no longer be available for responsible use in European salmon feed beyond 2026.

Following the loss of certification, the North Atlantic Pelagic Advocacy Group (NAPA) launched an FIP to restore the sustainability of the fishery and work toward recertification. Yet, despite this effort, progress has been limited. The FIP is scheduled to conclude in October 2026, and its success depends on the coastal states – Norway, the European Union, the UK, Iceland, the Faroe Islands, and Greenland – reaching a quota-sharing agreement that aligns with the scientific advice provided by the International Council for the Exploration of the Sea (ICES).

While these countries consistently acknowledge the ICES guidance on total allowable catch (TAC), they have for over a decade set unilateral quotas, collectively exceeding the sustainable limit. Until a binding, cooperative agreement is reached, the MSC certification cannot be reinstated. Leading feed producers and salmon farming companies in Norway have made it clear: the sourcing of blue whiting will cease if no agreement is in place by autumn 2026.

A call for collective responsibility

“We are deeply frustrated,” says Leif Kjetil Skjæveland, Sustainability and Public Relations Manager at Skretting Norway and Deputy Chair of NAPA’s Blue Whiting Subgroup. “There is no real sign of substantive negotiations among the coastal states – not for blue whiting, nor for the associated stocks of mackerel and herring. For too long, stakeholders have blamed one another. It’s time for compromise. Without a quota-sharing agreement, the market will move on. That would be a tragic loss. Blue whiting is an excellent raw material – it is sustainable, and it is readily available. But we cannot continue to source from a fishery that lacks credible management.”

NAPA represents over 50 leading retailers, foodservice providers, and suppliers from across the globe. Together, they account for the majority of mackerel, herring, and blue whiting purchasing in the Northeast Atlantic. As a collective market voice, NAPA advocates for science-based, responsible sourcing practices. Third-party certification remains the industry standard for demonstrating responsible supply chains – but this avenue is closed without fundamental changes to current fisheries management.

While the catching sector has always played a key role in quota negotiations, the market perspective is now stepping up. NAPA continues to engage with both governments and the fishing industry to promote a shared, long-term solution.

“We are committed to building a coalition of the willing,” Skjæveland adds. “We’ll speak with anyone who is ready to listen – and even those who aren’t. A binding, science-aligned agreement on sustainable management of blue whiting, herring, and mackerel is critical. The future of our industry – and our ability to continue using sustainable marine ingredients – depends on it.”



Leif Kjetil Skjæveland
Sustainability and Public Affairs Manager
Skretting Norway

"Soy" far so good:
We are happy to report that 99.6% of our global soy purchases comply with our goal of being 100% deforestation-soy free. Read more on the next pages.

Producing 2.5 million tonnes of feed annually requires us to source about 600,000 tonnes of soy products. To meet this demand, soy farmers need to cultivate over 180,000 hectares of land, equivalent to 275,000 football fields – an enormous land footprint! About 60% of this footprint is located in countries where farms are expanding into forests at a rapid rate.

We believe it is our responsibility to make sure that we source from soy farmers that do not contribute to this expansion into forest. Through the Nutreco Soy and Oil Palm Sourcing Policy, we ensure responsible sourcing across Nutreco companies, including Skretting. The policy categorises soy and palm ingredients based on deforestation risks associated with their country of origin, promoting the use of adequate certification where risks are high. This way, we work towards our Nutreco RoadMap 2025 target to become deforestation free by the end of 2025.

In 2024, 99.6% of our total soy volumes complied with our intermediate goal of achieving Class A or B standards. This represents a great increase in compliance compared to last year and highlights how the business

has been able to support soy farmers in their journey to become deforestation free.

While we celebrate this high percentage of compliance, we recognise there is always room for improvement. For example, we are scrutinising the use of book & claim (B&C) credits as part of Class B. Many stakeholders, including the ASC, SBTi and Product Environmental Footprint Category Rules (PEFCR), are requiring the use of controlled mass balance or segregated chain-of-custody systems, which would ensure that there is a physical flow of soy between the farmer and Skretting, without off-setting our impact through credits.

Even though credits allow us to directly support deforestation-free farmers, they do not ensure the product we receive is deforestation free. Therefore, we are evaluating what changes we should make to our sourcing policy to future proof it, considering the evolving requirements from different stakeholders. The table below shows the 2024 percentage of soy volumes purchased with different chain-of-custody models.

Skretting total soy volumes purchased in 2024

Chain-of-custody	Percentage of total
Segregated	19%
Mass balance	43%
B&C credits	28%
No certification	10%

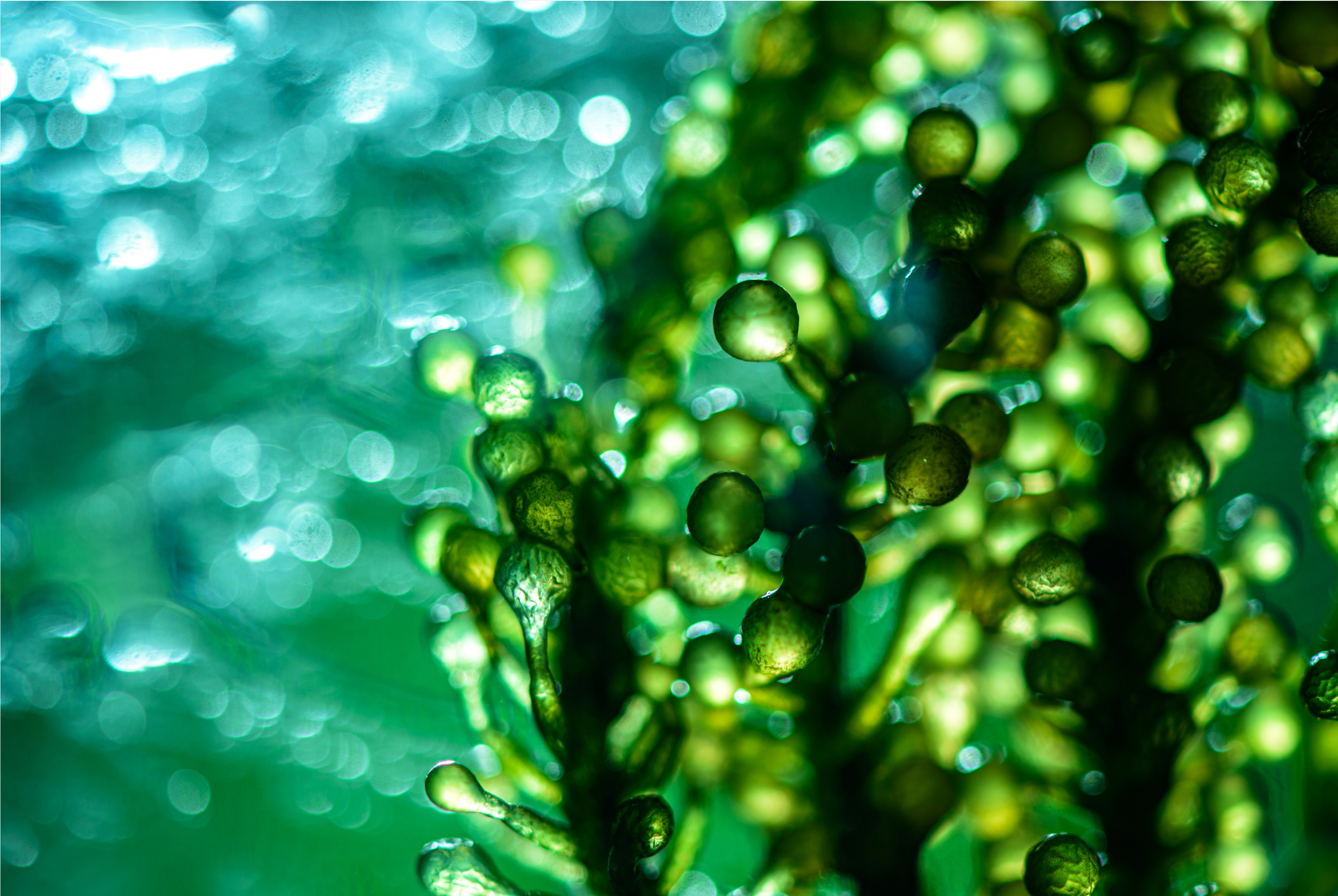
With all that in mind, our achievement of reaching nearly 100% of soy sourcing within Class A or B was only possible through our collaboration with many stakeholders, both internally and externally.

Skretting 2024 deforestation-free soy purchases

	2020	2021	2022	2023	2024
Class A:					
The soy ingredient is traceable back to a country or region with a low risk of deforestation or traceable back to a country or region with a high risk of deforestation but purchased through a certification program that verifies no deforestation has occurred (segregated supply chain).	68%	60%	62%	58%	49%
Class B:					
The soy ingredient is traceable back to a country or region with a low risk of deforestation or traceable back to a country or region with a high risk of deforestation but purchased through a certification program that verifies no deforestation has occurred (segregated supply chain).	18%	32%	35%	34%	51%
Class C:					
The soy ingredient is traceable back to a country or region with a high risk of deforestation and is purchased through a certification program that verifies no illegal deforestation occurred.	0%	0%	0%	0%	0%
Class D:					
The soy ingredient is traceable back to a country or region with a high risk of deforestation and purchased without any certification related to deforestation.	13%	8%	3%	7%	0%
Unknown origin:					
	1%	0%	0%	1%	0%

(continued) →

Our novel ingredients approach



At Skretting, we see novel ingredients as a key driver in the shift toward more sustainable aquaculture. Novel ingredients are ingredients not yet widely used in our industry, but with strong potential to improve our feed offerings.

In 2024, novel ingredients represented 2.23% of Skretting’s total ingredient spend and 0.94% of total ingredient volume. As demand for seafood grows and pressure intensifies on traditional ingredients, such as fish oil and fishmeal, novel ingredients create opportunities to reduce our environmental impact while maintaining feed performance and quality.

The novel ingredient space is an emerging market that is dynamic and still taking shape. The road from innovation to commercial adoption is complex, and we’re committed to supporting the suppliers that show high potential and are aligned with our sustainability ambitions.

A major short-term challenge is the limited availability of eicosapentaenoic acid (EPA) and docosahexaenoic acid

(DHA) – essential omega-3s still largely sourced from fish oil. This dependence creates a clear bottleneck for industry growth. Without scalable alternatives such as algae oil or fermentation-based sources, we risk falling short on both sustainability targets and nutritional standards.

Cost and value are critical to our ability to adopt novel ingredients. To scale, novel ingredients must deliver sustainability and supply resilience at a justifiable cost. While they may carry a premium today, novel ingredients diversify our sourcing, reduce risk, and build long-term resilience. As production grows and costs stabilise, market demand will be key to mainstreaming adoption.

Skretting is ready to lead this transition – driving innovation, partnering with pioneers in the space, and laying the groundwork for a more resilient and responsible aquaculture feed system.

How does Skretting define “novel ingredients”?
At Skretting, we want to take the lead in the emerging market of novel ingredients, and that requires clear direction.

Creating a definition for novel ingredients serves multiple purposes: it guides our internal decision-making when we’re scouting for new raw materials while also ensuring transparency in our external communications about what we classify as novel and the criteria these ingredients must meet to be viable in aquaculture.

Our definition: "Novel ingredients are raw materials that have not yet been used in aquaculture at scale, with the potential of expanding and enhancing our feed offerings. They must be evaluated on food safety, nutritional value, scalability, cost competitiveness, and their environmental and social impact."

This definition consists of two key elements: first, a clear statement of what constitutes a novel ingredient for Skretting, and second, a recognition of the challenges that must be addressed for successful adoption. To bring further clarity, we have identified specific ingredients as priority areas for the next five years.

Novel ingredients used in aquaculture feed

Ingredient type	Description	Examples
Alternative sources of EPA/DHA fatty acids	Provide essential omega-3 fatty acids, crucial for fish health and human nutrition	Algal oil, genetically modified rapeseed oil
Sources of saturated fatty acids	Provide concentrated energy and fat for feed formulations	Coconut oil, black soldier fly oil
Single cell protein from yeast	Protein derived from yeast fermentation	Brewers yeast, torula yeast, <i>kluyveromyces</i>
Single cell protein from bacteria	Protein made through bacterial fermentation	Hydrogen-oxidizing bacteria (HOB), methane oxidizing bacteria (MOB), co-products from amino acid production, other protein producing bacteria
Fungi/mycelium protein	Protein derived from fungal biomass or mycelium	Mycoprotein
Under-utilized vegetable proteins	Plant-based protein sources that are less commonly used in feed	Grass, alfalfa, side streams from vegetable processing
Upgraded vegetable proteins	Vegetable proteins enhanced through processing (e.g., concentration)	Pea protein concentrate, rapeseed protein concentrate, lupin protein concentrate, fermented vegetable proteins
Under-utilized processed animal proteins, PAPs	(By-)products from different industries repurposed for feed use	Insect meal, meat and bone meal
Marine fish & animals	Protein derived from marine animal species	Under-utilized fish resources, tunicates, mussels, sea urchin, calanus, krill
Macro- and microalgae and marine vegetables	Protein derived from algae	<i>Nannochloropsis</i> sp. seaweed
Phytocomplexes	Natural mixtures of bioactive compounds found in plants	Essential oils, polyphenols, alkaloids
Functional ingredients	Health related ingredients aiming to improve immunity, digestion, or performance	Prebiotics, probiotics, antioxidants, hydrolysates

Skretting will actively collaborate with suppliers that demonstrate strong potential – which we assess through the Skretting Targeting Matrix – to overcome these challenges and drive the commercialisation of novel ingredients in aquaculture.

The Skretting Targeting Matrix

To identify high-potential novel-ingredient suppliers we want to collaborate with, we use the Skretting Targeting Matrix, a strategic tool aligned with our sustainability strategy. It helps assess and prioritise suppliers based on three key pillars: sustainability, ingredient performance, and supplier capabilities.

The matrix evaluates essential criteria, such as emissions, social and environmental impact, nutritional value, cost competitiveness, scalability, and regulatory compliance. It distinguishes between two levels of requirements:

Ticket to play:

Minimum criteria suppliers must meet to enter the aquaculture feed market.

Ticket to stay:

Ongoing requirements for long-term competitiveness.

By using this framework, Skretting aims to collaborate with suppliers scoring as high as possible at their development stage. The matrix also serves as a guide for startups looking to enter the aquaculture sector and become future Skretting partners.



Annette Berntsen
Business Developer
Novel Ingredients



Ticket to Play:
These criteria represent the essential requirements that suppliers must meet to enter the aquaculture feed market.



Ticket to Stay:
These criteria reflect ongoing requirements for suppliers to remain competitive and relevant in the long term.

The Skretting Targeting Matrix

Sustainability

Low(er) environmental footprint
Biodiversity impact
Social impact: Human rights/ethical labour
LCA (ISO 14040/44, PEFCR, GFLI)
Contribution to circular economy
Food/feed competition
Animal welfare and performance
Continuous footprint reduction/pathway

Ingredient performance

Fit for purpose nutritional profile
Regulatory compliance
Market demand and acceptance
Cost competitiveness
Quality documentation
Scientific data/trials
Physical properties
Scalability potential

Supplier capabilities

Quality certifications: FAMI-QS, ISO 9001, HACCP, GMP+, ASC
Quality assurance processes/regulatory compliance
Financial security
Purpose and vision/cultural fit
Market understanding
Innovation capability/customisation options
Network/innovation ecosystem
Competence mix

Embracing circular feed ingredients

Circular ingredients – derived from food production byproducts, surplus materials, and agricultural residues – transform waste into valuable feed sources. One of the key benefits of circular feed ingredients is their ability to repurpose materials that would otherwise be discarded or removed from the food system altogether. For instance, byproducts from grain milling, food processing, and brewery operations can be incorporated into animal feed, offering essential nutrients while reducing dependency on conventional feed sources. In 2024, about 36% of our raw material needs were covered by circular ingredients.

The use of circular ingredients differs between species and regions. Because they are often less nutrient dense, we see more of them find their way into diets for species that tolerate this. Other fish, such as salmon, receive feed that is high in energy, making circular ingredients potentially unsuitable for these diets.

Land Animal Products (LAPs), byproducts from chicken and pork production, fit the requirements of fish needing high-energy feed, and, therefore, we use these products in many regions. Unfortunately, not all markets accept these byproduct ingredients in salmon feed, which increases the use of non-circular ingredients, such as soy protein concentrate.

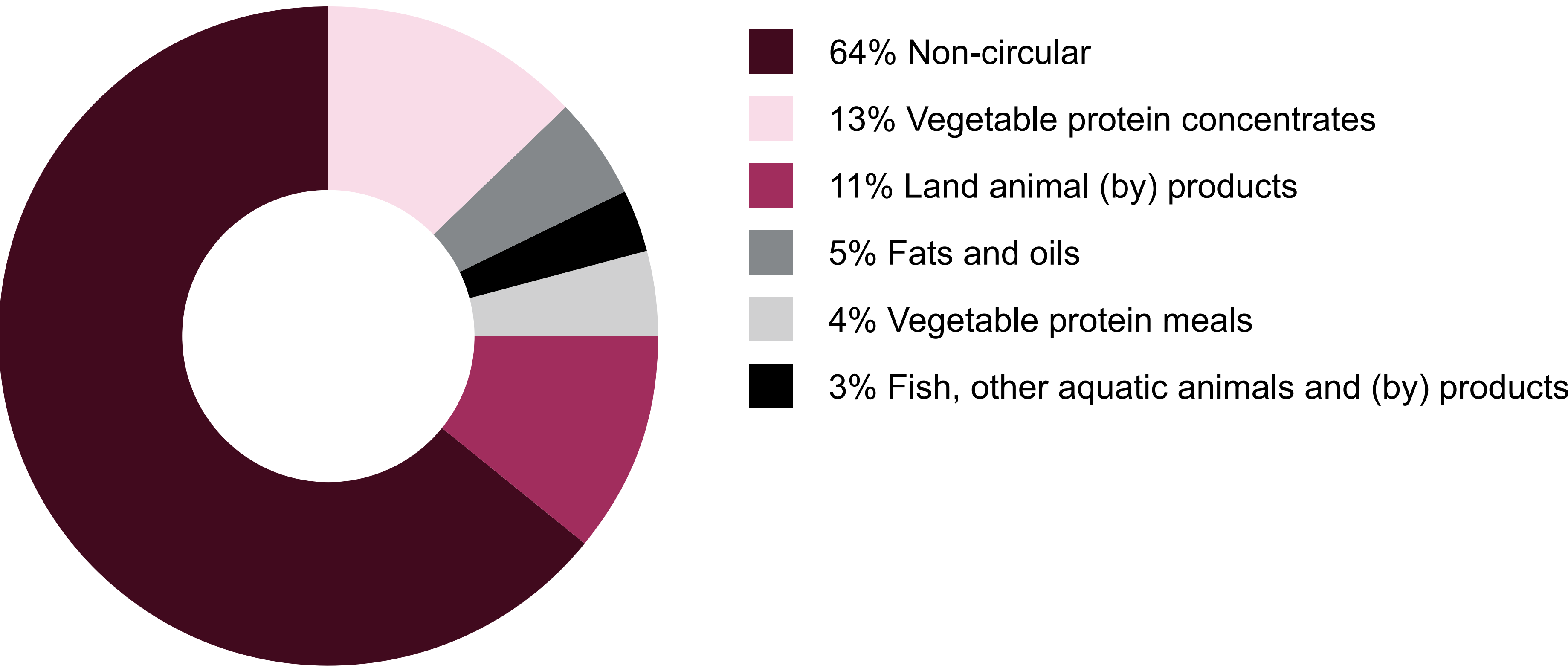
Embracing circular feed ingredients will play a pivotal role in creating a resilient, environmentally friendly food system, including aquaculture.

We define circular ingredients as: former food stuffs recovered as secondary raw material with an allocated economic value of less than 50% relative to the main product.

Percentage of circular ingredients used at Skretting

	Circular
BU Asia	27%
BU LatAm (Aquaculture)	12%
BU MEA	44%
BU Salmon	36%
BU Southern Europe	56%
Global Skretting	36%

Categories of circular ingredients used at Skretting



Regenerative agriculture: Friend or foe?

Regenerative agriculture presents a compelling opportunity for the aquaculture industry to make an impact on the crop farms used to produce feed materials. By focusing on soil health, biodiversity, and carbon sequestration, regenerative techniques offer a promising way to cultivate raw materials with minimal environmental impact. However, despite our enthusiasm for incorporating regenerative ingredients into aquafeed, complex carbon accounting rules create significant barriers to evaluating the true value of these projects.

One of the biggest challenges lies in how emissions and carbon savings are calculated. While regenerative agriculture promises to improve soil carbon storage and overall ecosystem resilience, the methodologies for quantifying its benefits are still evolving. Current carbon accounting frameworks often fail to capture the full scope of regenerative practices, making it difficult for us to determine whether these projects contribute to their commitments in a verifiable way. Without standardised metrics to evaluate the net impact of regenerative agriculture, we risk investing in approaches that,

although promising, may not meet strict reporting requirements.

Through our work with suppliers on several regenerative proposals, we see the need to widen the scope from only focusing on carbon sequestration to also include other aspects, such as biodiversity and efficient nutrient use. This widened scope comes both as an opportunity and a challenge in both knowledge and cost, but, in the end, will provide a broader range of opportunities for our customers to take action. Ultimately, the shift toward regenerative ingredients aligns with our purpose of Feeding the Future – and it is up to us to connect our customers with promising regenerative projects.



Innovative product launches with sustainability at the core

AmiNova

In 2024, we launched AmiNova, an innovative feed formulation concept that brings an even greater level of precision to fish nutrition and is based on our understanding of the essential nature of proteins. Individual proteins are made of a unique balance of amino acids, each providing a specific function in fish nutrition. Traditionally, aquaculture feeds have been formulated based on crude protein and, subsequently, on digestible protein. With AmiNova, we are introducing a new way of formulating, based on an ideal digestible amino acid profile. By evaluating the total amino acid level that is effectively ingested by the fish and removing the unnecessary excess, we can meet the nutritional needs of fish with increased precision and efficiency.

R&D results have shown that, with AmiNova, fish are able to retain nutrients in a more efficient way, while maintaining performance. Our trials with salmon and trout have shown a significant reduction in nitrogen discharge into the farm environment.

AmiNova

Armis

Shrimp have taken a lead role in contributing to world food security through the industry's rapid growth in recent decades. However, the dependency and constant interaction that shrimp have with their environment means that they are persistently exposed to naturally occurring challenges that have a negative impact in the shrimp and can potentially impact production. Recognising the scale of the threat posed by these challenges, in 2024, we launched Armis, a functional feed for shrimp.

Armis offers a practical solution that supports shrimp resilience and continued growth under challenging conditions, preventing overstocking and providing a cost-efficient alternative for farmers.

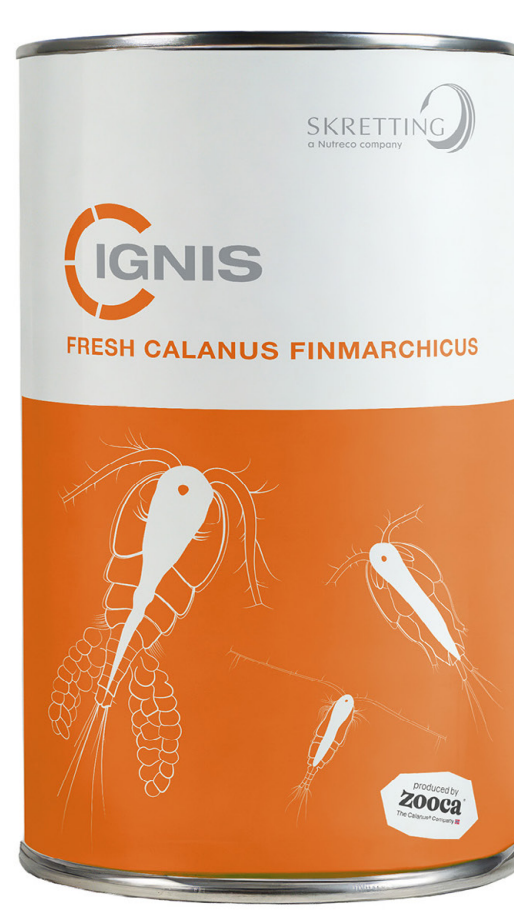


Ignis

With the introduction of Ignis – developed in collaboration with Zooca Calanus – Skretting customers now have access to fresh, canned Calanus finmarchicus.

Calanus finmarchicus is a tiny marine copepod rich in essential nutrients. This abundant resource offers marine juveniles high-quality nutrition, promoting efficient feed intake and digestion. The ready-to-use copepods offer a new level of convenience, as well as opportunities to refine larval production and shrimp broodstock feeding.

R&D results have shown that, when used during the transition period, shrimp fed with Ignis had a higher survival rate. It was observed that shrimp larvae were immediately attracted to the copepods, and that water turbidity was not impacted.



Looking beyond the carbon footprint with AmiNova

We are finding ways to make our feeds more efficient while also reducing environmental waste by reducing nitrogen discharge. Our research has shown us that by understanding target species’ specific requirement for amino acids, in addition to the amino acid profile and digestibility of individual raw materials, we can optimise our feeds and reduce the inclusion of crude protein.

We have completed several trials in salmon and trout that demonstrate we can do this while achieving the same animal performance. The result of these findings was the introduction of our new feed formulation concept, AmiNova, in 2024. This innovation is an example of how we are increasing the efficiency of our feeds and reducing environmental waste through a reduction in the discharge of nitrogen.

This can be particularly important on farms where discharge can be a limiting factor in production capacity. By reducing discharge, farmers can produce the same amount with lower impact or even create the opportunity for increasing production volumes without increasing environmental impact.

Achieving the same performance in animals is possible by further utilising fats and starches as alternative energy sources to protein and maintaining the same overall dietary energy level. However, it is important to note that this does not necessarily mean that the carbon footprint will also decrease. Oils, in general, have a higher footprint value than proteins and are higher in energy than starches. Therefore, when we apply AmiNova in salmonid diets, we commonly see an increase in oil inclusion, which can bring the footprint up to or above the initial recipe, depending on the oil blend and origins.

This is further evidence that it is important to look beyond carbon footprint alone when we talk about sustainability.

Chapter 5

ACT



Launching our new sustainability value proposition

Nutreco's RoadMap 2025 sets out our sustainability ambitions in three main pillars – health and welfare, climate and circularity and good citizenship – and through 36 ambitious targets, including our commitment to the SBTi. RoadMap 2025 has helped us define our North Star and slowly, but steadily, move towards it. Many of the steps we've taken forward have happened in the background, the result of efforts by our teams across the globe – sometimes because customers and the market require action, other times because it is simply the right thing to do.

Over the years, we focused on certain topics, which we reported on in our annual impact report. We recognise that the reporting is often done on entity level, which means we publish aggregate numbers for Skretting, a business unit or operating company that cover feeds supplied to all our customers. However, how do these aggregate numbers help individual customers with their commitments?

They do not.

Our customer base is extremely diverse: in size, geography, production system, market positioning, and sustainability ambitions. The numbers in this report show how Skretting is performing, however our customers want to understand how THEY are performing. And we will help them with this understanding. This report shows that we have the data, the action plans, and the supply chain partners. Through our new value proposition, ACT, we will ensure real change and help our customers achieve their desired sustainability ambitions.

Through our new value proposition, ACT, we will ensure real change and help our customers achieve their desired sustainability ambitions.



ACT is Skretting's new sustainability value proposition. ACT is about co-creating change.

Build connections

Building connections means involving the right stakeholders to accelerate change. By collaborating with suppliers, customers, and partners, we strengthen the entire value chain, ensuring that sustainability also drives business success for everyone involved.

Lead with action

At Skretting, action means doing what matters most – decisively and with impact. By focusing our efforts on the right areas, we ensure maximum sustainability outcomes while delivering clear economic value for both suppliers and farmers.



Ensure transparency

Transparency means empowering decisions by being a trusted advisor and providing the right information. We share knowledge and data openly, enabling informed choices that enhance efficiency, sustainability, and profitability for suppliers and farmers alike.

A ripple can become a wave:
A small act can be seen, tasted,
felt... and lead to lasting impact.



Chapter 6

Collaboration is key



AquaVision 2024: Challenges and opportunities

Nutreco and Skretting hosted the 15th edition of AquaVision in Stavanger, Norway, from June 10-12. The two-day conference was the perfect networking arena for 450 participants from more than 50 countries to discuss the challenges and opportunities facing the industry – and how to tackle them together.

Acting towards a sustainable future

Nutreco CEO David Blakemore talked about the company's role in feeding the world's rapidly growing population. "In Nutreco, we have over a century of experience providing high-quality nutrition to the animal and aquaculture industry. Feeding the Future is not just our purpose, it's also our passion and responsibility," he said.

The next speakers after David dove into the topic of sustainability. Gonzalo Muñoz, UN Climate Change High-Level Champion for COP25, summarised the immensity of this challenge: "Getting to net zero by 2050 is massive. We've been really slow, and things need to change exponentially."

Dealing with market disruption in an ever-changing world
World-renowned economist Professor Paul Krugman gave an interesting overview of the state of the world economy today, talking about the economic impacts of Covid-19 – he feels we've "bounced back very quickly" – inflation, globalisation, and of course, politics.

Claudia Salem from Santa Priscila talked about innovation and the development of Ecuador's shrimp industry. Participants also received insights from Dr Santhana Krishnan, CEO of Marine Technologies, and Jason Yang, General Manager of Nutreco China, who talked about the growth opportunities in India and China respectively.

Looking beyond tomorrow
Anita Schjøll Abildgaard, CEO of Iris.ai, told participants that aquaculture executives need to be looking out for technology, such as real-time video processing and fully autonomous devices, and that it's important to see how artificial intelligence (AI) can be integrated to streamline

processes. The audience also got sneak peeks of today's most revolutionary innovations, from the work happening at Nutreco's Garden of the Future to AKVA Group's new technology being used in Nordic Aqua Partner's brand-new China facility.

Skretting's CEO Bastiaan van Tilburg concluded the conference by saying we must link the challenges we have in our industry to the expertise gathered in the room – and he expressed his belief that the industry can make magic together.



Professor Paul Krugman gives the keynote speech at AquaVision 2024.

Making strides in Vietnam:
Skretting formed a consortium with seven other companies to improve shrimp farming practices throughout the country. Read more on the next page.



Advancing Vietnam's profitable net-zero shrimp farming

In March 2024, Skretting Vietnam, along with seven other companies, launched "The transition towards profitable net-zero shrimp farming" program as part of ShrimpTechVietnam, a consortium of eight companies aiming to improve shrimp farming practices in the country. The companies have complementary expertise along the value chain, ranging from farm Internet of Things (IoT) technology to probiotics to specific pathogen-free polychaetes and disease diagnostics. By combining this expertise, the program supports farmers in reducing carbon emissions in their shrimp farming operations while maintaining profitability. Knowledge transfer will be facilitated through training, demonstrations, and seminars.

The consortium kick-started the project through a seminar in March where all the companies shared their expertise on sustainable aquaculture with Skretting farmers. Through the program, Skretting Vietnam is offering farmers valuable technical assistance by providing access to knowledge from multiple perspectives.

The ShrimpTechVietnam project partners have established trials to test shrimp feed with lower protein content, as part of their efforts to reduce carbon emissions. The results of these trials will be shared as a foundation to educate and support farmers in their journey towards profitable net-zero farming.

Looking ahead to 2025, Skretting has planned promising activities with the ShrimpTechVietnam consortium, focusing on the next generation of aquaculture professionals and farmers in Vietnam. The consortium will organise a hackathon, bringing together students from multiple universities who will work in groups to develop innovative ideas for making aquaculture more sustainable. During the final event, students will have the opportunity to pitch their ideas, and the best teams will be selected. Through this initiative, we focus on collaboration and sharing ideas with the new generation of farmers, who represent the future of Vietnam's aquaculture sector.



Skretting Vietnam employees at a shrimp farm during LCA training.

Skretting is working closely with partners to support the growth of sustainable recirculating aquaculture system (RAS) production in Japan. In 2024, the country marked a historic achievement with its first-ever domestic harvest of Atlantic salmon. This milestone underscores Japan’s commitment to sustainable aquaculture and food security, and is a testament to what customer intimacy and close collaboration can achieve. The salmon was cultivated in a state-of-the-art RAS facility in Shizuoka Prefecture, established and operated by Norwegian firm Proximar Seafood in 2022. RAS technology significantly reduces environmental impact by minimising water usage and ensuring responsible waste management, aligning with global sustainability goals.

Skretting, a key partner in this initiative, has played an integral role in supporting Proximar through its expertise in sustainable feed solutions. From the inception of the project, Skretting’s global team has collaborated closely with the RAS team in Skretting Japan, with additional support from the company’s fish quality service team to ensure comprehensive monitoring. This first harvest is

not just an operational milestone but a testament to the potential of sustainable aquaculture in Japan. “We are very excited to see that all our years of planning and preparation are now paying off. This year, we are harvesting fish on a weekly basis and can supply Japanese consumers with locally produced Atlantic salmon. We see the strong interest in our ‘Fuji Atlantic salmon’ in the Japanese market. This interest is also driven by the benefits of our business. Contributing to local supply and self-sufficiency in a sustainable and future-oriented way of production are important aspects. The transfer of know-how of modern aquaculture solutions is also something we feel is highly appreciated, contributing to revitalising the Japanese fisheries industry.

“Proximar has, since its inception, focused on building a platform with relevant stakeholders, to secure the future success of the operation. RAS and aquaculture are complex operations, requiring specific skills and know-how. Securing deep know-how through our partners has, therefore, been crucial. Our long-term close cooperation with Skretting and Nutreco is an example. Tapping into expertise is an important contributor for success, and we see how this

has also contributed to where we are today. We also believe this is important going forward and paving the way for our successful continuation in the years ahead,” said Joachim Nielsen, CEO of Proximar.

Through continuous investment in sustainability-driven solutions, Skretting and Proximar are paving the way for a more responsible and efficient future for aquaculture in Japan and beyond.



Proximar CEO Joachim Nielsen with Skretting CEO Bastiaan van Tilburg holding the first harvested salmon.



The beautiful colour on the salmon.

Powering sustainable RAS development in China

Skretting is also working with partners in China to build a greener, more resilient future for aquaculture. April 19, 2024, marked a significant milestone for China's aquaculture industry with the first-ever domestic harvest of Atlantic salmon raised in a recirculating aquaculture system (RAS). Reaching an average weight of 5.7 kilograms, these salmon were produced at a state-of-the-art land-based facility in Ningbo, Zhejiang Province. This was Asia's first RAS project for Atlantic salmon, launched by Nordic Aqua Partners (NAP) in 2018 and fully operational since 2022.

As a long-term strategic partner, Skretting has been working closely with NAP since the early stages of the project. In 2022, Skretting China's Zhuhai plant, guided by our global team, became the first in Asia to receive RCX certification. This internal certification ensures that feed produced at the facility meets strict quality parameters necessary for top-quality RAS feeds. Since then, we have been supplying NAP with stable, high-performance feed that aligns with Skretting's global standards.

Skretting's partnership with NAP shows how global expertise and local innovation with impact can drive sustainable growth. In Q1 2025, 99% of NAP's harvested salmon reached the premium 7.5-kilogram standard – highlighting the strength of their model and our feed solutions. With plans to expand capacity to 20,000 tonnes annually, NAP is set to lead the way in sustainable salmon farming in China.



Skretting Aquaculture Innovation's Innovation Director Alex Obach with Nordic Aqua Partners' Fish Health Manager Alejandro Millar at the NAP facility in China.

Dutch retail giant Albert Heijn debuts sustainable shrimp from an innovative value chain collaboration

Albert Heijn is setting a new standard for sustainable seafood in the Netherlands. They are the first to introduce farmed shrimp that are raised with significantly higher welfare standards and have a low marine footprint, a culmination of several years of collaboration between multiple supply chain partners.

Albert Heijn, a leading Dutch retail chain, has started selling sustainably farmed shrimp supplied by a groundbreaking value chain consortium. This consortium includes shrimp importer Klaas Puul, feed manufacturer Skretting, innovative feed ingredient providers Veramaris and Protix, and Cofimar, an Ecuador-based farm.

The consortium has successfully developed innovative shrimp feed, crafted by Skretting Ecuador for Cofimar. The feed incorporates alternative ingredients such as Veramaris algal oil, a rich source of essential Omega-3 EPA and DHA, and Protix insect meal, significantly reducing the marine footprint of the feed formulation. Moreover, these shrimp are ASC-certified and raised in accordance with stringent welfare practices, ensuring both environmental and social responsibility throughout the farming process.

Shoppers in the Netherlands can find these sustainable shrimp products on Albert Heijn's shelves, a testament to the supermarket's commitment to animal welfare, eco-friendly feed, and the reduced

marine footprint of farmed seafood. Emiel Beekwilders, Quality Manager for Meat, Seafood, and Cheese at Albert Heijn, emphasized the benefits of such partnerships: "Collaborating with Veramaris, Skretting, Klaas Puul, Cofimar and Protix not only advances sustainable aquaculture but also delivers healthier and more sustainable choices to our customers."

As the consortium celebrates this significant achievement, it is also looking to the future by actively seeking partnerships with other retailers to widen the availability of sustainable shrimp and expand these sustainable practices across the industry.



Albert Heijn introduced farmed shrimp that are raised with significantly higher welfare standards and have a low marine footprint, thanks to this value chain collaboration.

At Skretting, we're convinced that we can only make meaningful progress in our industry through collaboration. By connecting with the right stakeholders across the value chain, we can combine our knowledge and skills to address complex issues and explore solutions that could not be achieved by working in isolation. We identify our stakeholders as any group or individual that Nutreco and Skretting affects through our activities, products and services and who, in turn, may affect our ability to achieve our goals. Using this definition, we recognise six main stakeholder groups: employees, government, external platforms for specific sustainability topics, food retail and services, academia and non-governmental organisations (NGOs).

You will hear from some of them in the next pages.



SeaBos members at the Annecy Dialogue in October 2024.

Santa Priscila:

For nature, people, and progress

“There is no sustainability without transparency, and there is no transparency without trust.” With these words, Claudia Salem, sustainability leader at Santa Priscila, describes her company’s vision regarding environmental responsibility and economic and social development. This sustainability expert is convinced of the power and potential that companies have in order to become change agents.

Claudia affirms that partnerships – which she prefers to call synergies – are essential to mitigate impacts and enhance transformation. “Sustainability shows us that we are all connected. You can’t do it alone,” she says, which is why she believes the most important Sustainable Development Goal is Partnerships for the Goals. “With Skretting, we’ve shared the same vision about the capacity for effort and responsibility. More than a supplier, they are a partner, and in that way there are no limits to what we can achieve. We’ve been working on this relationship for many years, and we continue to build it every day. It’s a dynamic relationship in which we continuously exchange information, encourage research, and foster innovation.”

Claudia defines this process as constant co-creation and shared commitment, and all teams work every day with firm conviction to improve the production of nutritious food, respecting the wisdom of nature, protecting ecosystems, and generating opportunities that promote social development, both nationally and globally. That is why she believes that sustainable aquaculture is – and will continue to be – the key to the present and future for all of us.



Fresh shrimp from Santa Priscila's Chanduy farm in Ecuador.

WWF and GSI: Driving ESG transparency

In 2024, the World Wildlife Fund (WWF) and the Global Salmon Initiative (GSI) launched a new feed risk assessment tool that will improve visibility into aquaculture feed supply chains, allowing stakeholders to better identify and address possible ESG risks. Industry representatives from aquaculture and feed manufacturing backed the importance of the new tool, among them Grieg Seafood and Skretting.

In 2019, global attention was drawn to the Amazon rainforest fires, prompting heightened scrutiny of soy use in the Norwegian salmon industry. This catalysed a major shift in sourcing practices. “The industry responded by implementing a 100% deforestation- and conversion-free soybean value chain,” recalls Tor Eirik Homme, Director of Feed and Nutrition, and Chief Sustainability Officer at Grieg Seafood. “It was a wake-up call. We realised we lacked first-hand insights into the ESG risks associated with our feed ingredients. That triggered our journey toward greater transparency.”

When Grieg Seafood initially approached feed suppliers for ESG-related data, the findings were clear: while the ingredient

value chain was highly efficient in terms of procurement, logistics, and quality assurance, information on ESG risks was limited or unavailable. “Even our suppliers had significant knowledge gaps,” says Homme. “This lack of insight left the sector vulnerable to unintended risks – even for companies striving to produce responsibly and sustainably.”

Recognising the need for change, Grieg Seafood pursued a collaborative and long-term approach. “Our philosophy is simple: it’s always okay to ask tough questions, but we also need the patience to wait for meaningful answers,” Homme explains. “Over time, it becomes clear that those who can provide these answers – those who deliver transparency – will be the real leaders in sustainable aquaculture.”

In partnership with the WWF, Grieg Seafood began developing a methodology and framework to assess ESG risks in feed ingredient supply chains. This initiative grew to include other salmon producers and feed companies, including Skretting, and in 2024, the GSI and WWF jointly launched a comprehensive feed risk assessment tool. The tool is designed to provide a standardised

and unified approach for evaluating ESG risks, covering areas such as biodiversity, climate change, natural resource use, environmental impact, health and welfare, nutrition, human rights, and governance.

A value chain-wide approach
“The key to the tool’s success lies in its ability to bring the entire value chain together,” says Homme. “By aligning around a common framework, salmon producers can ask the same structured questions to their suppliers. This streamlines data collection, enhances traceability, and supports continuous improvement in the sustainability of feed ingredients.”

Skretting was an early collaborator in this initiative. Jorge Diaz, Skretting’s Sustainability Director, highlights the importance of working across the supply chain to manage ESG risks. “The complexity and diversity of our global ingredient sourcing make it challenging to identify and address all potential ESG risks. We’ve made meaningful progress, but we recognise the need to go further – and faster,” Diaz notes.

“We support the implementation of this tool because it enables us to clarify both what we know

and what we still need to learn about our ingredient impacts. By addressing these knowledge gaps, we enhance transparency and improve performance throughout our operations.”

A living tool for evolving challenges
The purpose of the tool is to identify and mitigate risk – stimulating innovation and continuous improvement across the industry to ensure farmed salmon remains a healthy and sustainable protein choice for the future. Importantly, the tool is a method, not a standard. The ASC has reviewed the methodology and intends to incorporate it as a component of its due diligence framework within the ASC Feed Standard.

“When you begin exploring feed ingredients in detail, their complexity becomes evident,” concludes Homme. “Each ingredient can have multiple risk profiles depending on origin, processing, and supply chain dynamics. That’s why we need a method that is both robust and digitised. It will take time –but it will make us all more effective. Ultimately, this is about working smarter together.”

“We learned that we need to work to get the answers, and in the end, it is those who can provide answers that become the winners in such a system. Because those who deliver are the ones who benefit us most,” says Homme.



Tor Eirik Homme
Director Feed and Nutrition,
Chief Sustainability Officer,
Grieg Seafood

ProTerra: Building resilient supply chains beyond politics



Emese van Maanen
Managing Director

”
Collaboration along supply chains is crucial to respond to the volatility of the food supply system.

Feed and food companies are facing greater challenges than ever before – not only when it comes to extreme weather conditions and emission-reduction commitments, but also when it comes to navigating regulatory requirements around the world.

In recent decades, sustainability systems have proven to be a valuable tool and instrument for the assessment, management and mitigation of ecological, social and environmental risks associated with high-risk commodities.

Monitoring and Verification (MRV) systems have been developed to provide companies with a systematic approach to assessing and verifying an organisation's due diligence obligations.

In the extremely demanding global context, certification continues to provide a solid basis for ecologically and ethically responsible raw materials within the supply chain, which goes beyond the minimum requirements of national legislation.

Organisations that are better informed about the origin of the raw materials in their direct supply chain can identify the regions over which they have the greatest influence and the areas in which they can best engage. Being clear about what is expected of suppliers and what they consider to be sustainable sourcing is crucial for long-term collaboration and commitment.

Resilient supply chains require combined robust strategies that are challenged by current developments. Collaboration along supply chains is crucial to respond to the volatility of the food supply system. All of this is fundamental to ensure food safety and security for future generations regardless of global politics.

MarinTrust: Collaborating towards better standards

MarinTrust is the leading independent global certification programme for the marine ingredient value chain, encompassing the MarinTrust Standard for Responsible Supply of Marine Ingredients, the MarinTrust Chain of Custody Standard, and the MarinTrust Improver Programme. Our mission is to advance best practice in the responsible sourcing, traceability and production of marine ingredients, with the vision of being recognised as the only credible global standard for marine ingredients – currently MarinTrust certification covers approximately 45% of global production of fishmeal and fish oil, and our ambition is to increase this volume through the better utilisation of byproducts, innovative traceability and increased uptake of our Improver Programme.

As demand for responsible aquaculture products continues to grow, Skretting is increasingly required to source fishmeal and fish oil from certified sources or those factories participating in a Fishery Improvement Project (FIP), including MarinTrust’s Improver Programme. This requirement is central to compliance with key certification schemes within the aquafeed industry, including Best Aquaculture Practices (BAP), ASC, and GlobalG.A.P., which recognise MarinTrust Certification and MarinTrust Improver Programme Accepted factories.

Collaboration between MarinTrust and Skretting is instrumental to ensure a good understanding of the marine ingredients value chain and contribute to the development of the Standard. With the MarinTrust programme, Skretting supports its marine ingredients suppliers who are engaged in an ongoing and trusted process of third-party audits and assessments.

”
Our mission is to advance best practice in the responsible sourcing, traceability and production of marine ingredients.



Libby Woodhatch
Executive Chair

MSC: Helping ensure sustainable practices

”

MSC is proud to support Skretting in its sustainability efforts, and confident that, by 2030, 100% of marine ingredients used will be sustainable.



Erin Priddle
Regional Director
North Europe

Sustainability is a critical factor for aquaculture feed companies facing increasing regulations and consumer demand for sustainable products. In the context of a major global overfishing problem, with now 37.7% of stocks deemed overfished by the FAO, it is imperative that marine ingredients used in aquafeed come from sustainable fisheries. Leading feed companies like Skretting therefore face a sourcing challenge related to marine ingredients used in their feed.

The available supply of certified sustainable marine raw materials is limited and has not grown as fast as demand. Some of the key fisheries supplying raw material for fishmeal and fish oil (FMFO) production have for years been subject to overfishing. The Marine Stewardship Council (MSC) observes limited progress being made in improvement projects.

MSC is, therefore, actively stepping up its efforts to support feed companies in finding certified sustainable marine ingredients, supporting credible improvement projects through our Ocean

Stewardship Fund, and promoting the progress made by suppliers and feed actors. MSC is actively working with peers to ensure efficiencies are delivered in the feed supply chain.

MSC’s Improvement Program has become an instrumental tool to support and accelerate FIPs. It recognises fisheries’ improvement efforts through independent verification of progress made in “improvement action plans,” and helps with funding, expertise and capacity building.

As one of the largest global aquaculture feed producers, Skretting, along with other feed companies, has the responsibility to help secure sustainable fisheries management for the resources that are providing the raw material for FMFO production used in aquaculture feed. Through its environmental, social and governance (ESG) and procurement policies, it can help ensure sustainable fishing practices, and credible certification and improvement assurance systems will help. If successful, it will credibly enable Skretting to

meet market demand, as well as demonstrate compliance with the UN’s Sustainable Development Goal 14 and other targets. MSC is proud to support Skretting in its sustainability efforts, and confident that, by 2030, 100% of marine ingredients used will be sustainable.

SeaBOS: Skretting leaders help transform the industry



Martin Exel
Managing Director

The Seafood Business for Ocean Stewardship Initiative (SeaBOS) represents eight of the world's largest seafood companies, aligned in the mission to lead a global transformation towards sustainable seafood production and a healthy ocean. Skretting CEO Bastiaan van Tilburg was elected the CEO Sponsor for SeaBOS's West Coast Africa project, responsible for delivering outcomes to other SeaBOS CEO members. Skretting's Sustainability & Communications Director Jorge Diaz was elected as the lead executive, to coordinate actions across member companies, as well as the SeaBOS science leadership team, and deliver results.

By the end of October 2025, all SeaBOS companies will have completed Business and Human Rights training and undertaken global and local gap analyses of their Human Rights Due Diligence (HRDD) approaches, as well as global and national risk analyses for Illegal, Unreported, and Unregulated Fishing (IUU) fishing in their West Coast Africa supply chains. There will be local workshops held in mid-2025 to begin engagement with on-ground suppliers and stakeholders, with an aim to deliver positive outcomes in HRDD improvements and IUU fishing reductions.

Members also agreed to:

- Stronger time-bound goals for actions in their supply chains to address IUU fishing and modern slavery, including to “require all suppliers and processors of seafood products to affirm that they have no IUU products and do not use forced, bonded, or child labour, in their operations or supply chains”
- Sign and adopt a Code of Conduct on reducing antibiotic use and the risk of inducing antibiotic resistance
- Commit to a new approach to evaluate and report on their risk, dependencies, and impacts on biodiversity along their operations, supply and value chains, and portfolios

SeaBOS will report on results from all these activities following its October 2025 Keystone Dialogue, to be held in Japan.

Working with Partner Africa to improve our human rights due diligence

In 2024, Partner Africa conducted a “light-touch” Human Rights Due Diligence (HRDD) gap analysis of Skretting and three other SeaBOS companies. The analysis focused on their human rights policies and practices in West Coast Africa, specifically how they identify, prevent, address, and track human rights risks and impacts.

The analysis found that nearly all companies have policies setting human rights expectations for suppliers but struggled to verify their implementation in the region. While most companies have some channels of communication in place, accessibility varies widely between internal (employees) and external (suppliers/supply chain workers) stakeholders. And none were training suppliers on human rights.

Despite these gaps, companies expressed a strong interest in improving their HRDD approach, including through participation in

multi-stakeholder initiatives. Based on these findings, Partner Africa developed recommendations that companies could implement both as a collective – through SeaBOS – and individually to better their HRDD practices. These varied from strengthening knowledge of key risks – particularly in West Coast Africa – to undertaking training, monitoring key activities linked to human rights issues, and strengthening grievance mechanism accessibility to external stakeholders.

As a follow-up, Partner Africa is now rolling out "Phase 2" with SeaBOS, which includes training companies on business and human rights fundamentals and facilitating meetings between companies and key local stakeholders in West Coast Africa. This includes engaging with suppliers, local and international organisations, governments, and worker representatives to understand the nature of the human rights risks relevant to this sector.



Chiara Giaccari
Senior Responsible
Business Consultant at
Partner Africa

Global Roundtable on Marine Ingredients driving global sustainability improvements

Skretting has been a member of the Global Roundtable on Marine Ingredients since its creation back in 2021. The purpose of the Global Roundtable – driving improvement in key fisheries globally and increasing the availability of responsible marine ingredients – is well aligned with Skretting’s sourcing policy. Documented assurances by certification programmes and continuous engagement with suppliers are a must. Regions lagging, whose governments and civil society want to engage with international markets, should be supported. Such an approach sometimes requires a broad transformation of the local economy, involving new governance mechanisms, regional cooperation and infrastructure development.

In 2024, the Global Roundtable on Marine Ingredients reiterated that the focus on fish stocks and food security in the countries where raw materials are sourced is a priority for the value chain. Challenges lie ahead: long-term commitment is needed to ensure meaningful progress.

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Long-term commitment is needed to ensure meaningful progress.



Árni M. Mathiesen
Independent Chair of the
Global Roundtable on
Marine Ingredients

IFFO: Sharing an ambition for marine ingredients



Petter Martin Johannessen
Director General

”
IFFO appreciates Skretting’s commitment to fish growth and health as well as its dialogue with local communities.

The year 2024 provided the aquaculture value chain with a positive perspective about the availability of responsibly sourced fishmeal and fish oil for aquafeed manufacturing.

The marine ingredient industry showed its ability to rebound, after the El Niño phenomenon temporarily affected quotas and fishing activities in Peru’s anchoveta fishery in 2023 until early 2024. It also showed its leadership in science, with intense research activities (omega-3s, protein sources, holistic assessment of aquaculture feeds) as well as engagement with stakeholder groups involved in improving fishery management.

As a membership organisation, IFFO is committed to representing its members but has also set itself the ambition to lead the responsible development of marine ingredients. In this context, IFFO welcomes Skretting’s participation in all its initiatives: with its demanding sourcing policy for feed ingredients, Skretting recognises the strategic value of marine ingredients in terms of nutritional quality and environmental sustainability. IFFO appreciates Skretting’s commitment to fish growth and health as well as its dialogue with local communities.

ASC Feed Standard: Responsible feed for aquaculture



Aisla Jones
Feed Engagement and
UK Markets Manager

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Real transformation requires collaboration across the entire seafood value chain.

The Aquaculture Stewardship Council (ASC) is committed to transforming aquaculture by ensuring that it plays a vital role in feeding the world while minimising environmental and social impacts.

Our vision is a future where aquaculture not only supplies food but also provides social benefits for humanity, all while protecting the planet. To achieve this, our mission focuses on driving environmental sustainability and social responsibility in aquaculture value chains.

A crucial element in this transformation is the ASC Feed Standard, which is changing the narrative on responsible feed production. The ASC Feed Standard extends beyond farm-level requirements to assess feed mills and their suppliers, promoting transparency and accountability throughout the ingredient supply chain.

Real transformation requires collaboration across the entire seafood value chain. By working together and committing to transparent reporting, we can collectively drive further improvements in sustainability. The ASC Feed Standard requires all ingredients to be sourced responsibly, providing the industry with the knowledge needed to mitigate risks such as deforestation, overfishing, and labour exploitation.

Transparency not only benefits ecosystems, workers, communities, and consumers but also fosters continuous improvement. By sharing data and best practices, we can create a more resilient and responsible aquaculture industry – one that delivers lasting positive change for seafood production, people, and the planet.

Global Seafood Alliance (GSA) and Skretting partnering in multi-year engagement

The GSA is deeply invested in the future of aquafeed. As an international nonprofit organisation dedicated to advancing responsible seafood practices through education, advocacy and third-party assurances like our Best Aquaculture Practices (BAP) certification program, GSA is committed to helping the seafood industry on its journey of continuous improvement. GSA convenes seafood industry leadership, academia and NGOs to collaborate on cross-cutting issues like environmental and social responsibility, animal health and welfare, food safety and more. We are proud to have entered a multi-year engagement with Skretting, an innovative aquaculture feed producer that can help us better understand the seafood supply chains of BAP four-star partners and other stakeholders. The aquaculture feed value chain is complex, so staying

engaged with experts in the sector helps us move toward a more responsible future. This partnership is already positively influencing the development of a stronger BAP Feed Mill Standard, which we plan to execute in 2025. Amendments to this standard will offer a more granular, specific review of which ingredients qualify for participation. We're thankful for ambitious leading partners like Skretting. This powerful collaboration will help strengthen the standard while keeping it achievable and practical for global feed producers.

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We're thankful for
ambitious leading partners
like Skretting.



Devan Meserve
VP of Marketing and
Communications

GSI: Turning challenges into opportunities



Sophie Ryan
CEO

Watching the news these days can sometimes offer a bleak outlook for the future – climate risk, political uncertainty, civil unrest, rising inflation – and at times it can be hard to see the positives, when it appears there are challenges at every turn. But these challenges also pose great opportunities. Opportunities to excel in innovation, to look to science for pioneering breakthroughs, and to find ways we can become more efficient and more effective at what we do.

That’s how we work at the Global Salmon Initiative (GSI). We see challenges as opportunities. Amidst the uncertainty around us, we must stay the course and continue to focus on identifying and implementing possibilities that will improve our performance and ensure aquaculture continues to offer one of the most nutrient-rich sustainable proteins available.

A big part of our story is feed. And to know where we can improve, we must have full traceability down the supply chain. Which is why we have worked in partnership with WWF and industry feed suppliers to develop and launch our ESG Risk Assessment Tool for Feed Ingredients. The tool is a B2B resource, allowing farmers to work with feed suppliers to have a more holistic overview of possible risks in the supply chain, make informed sourcing decisions and encourage sustainability improvements where most material.

This initiative is one example of how we are approaching the future – a recognition that together we can take on big challenges and find ways we can create potential to drive positive change and farm salmon that’s raised to be better for people and planet.

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To know where we can improve, we must have full traceability down the supply chain.

Chapter 7

Our house in order



Governance: Putting sustainability at the core of what we do



Nutreco’s Sustainability function is led by the company’s CEO and is represented in the Management Board by the Chief Supply Chain Officer.

Nutreco’s Sustainability Director chairs the Nutreco Sustainability Platform (NSP), which includes the Sustainability Directors of Skretting and Trouw Nutrition, together with other key sustainability specialists that develop and execute our strategy across our operations globally.

Since April 2025, Skretting's Sustainability and Communications Director reports to the company's CEO and is part of Skretting's Leadership Team. This ensures full alignment with global functions and embeds sustainability at the core of our operations in a way that is supported by structured, strategic and effective communications to internal and external stakeholders in line with our business priorities.

Our governance of sustainability is guided by our [Code of Conduct for Employees](#) and [Code of Conduct for Business Partners](#).

Gaining traction with ASC certification around the world

The world population will likely grow close to 10 billion by the year 2050, and the question on everyone's minds is: how are we going to produce the food we need to support this growth in a sustainable way? As a feed manufacturer, Skretting understands that it has an important role to play in contributing to feeding the world, while also recognising and mitigating the associated environmental and social risks. One of the ways we are doing this is by committing to responsible sourcing and holding ourselves accountable by means of pursuing certification by the ASC Feed Standard.

This certification is a globally recognised standard ensuring responsible and sustainable aquaculture practices. By certifying our feed according to the ASC Feed Standard, we guarantee that we produce it using responsibly sourced ingredients, and that we meet strict requirements for traceability, environmental sustainability, and social responsibility. On this front, we are proud to report that we have been making steady progress.

Skretting Chile was our first facility to obtain the ASC Feed Standard certification in early 2024 and the first salmon feed plant in the world to achieve the recognition, shortly followed by our locations in Ecuador and Honduras. Our facilities in Norway, Spain, Japan, and Canada were audited during 2024 and achieved their certification in early 2025. By the time of this report's publication, our plants in Australia, Italy, and Vietnam will have been audited during Q1 2025 and we will be awaiting the results; Turkey and France are scheduled to be audited in Q2.

Obtaining these certifications will enable Skretting to support farmers who need to source ASC-certified feed as of October 2025 to maintain their farms' certifications.



Skretting Japan's General Manager Gihyeon Park receiving the ASC Feed Standard certificate in early 2025.

ASC certification: Driving a more sustainable shrimp industry in Ecuador



ASC Certification is crucial to the shrimp feed industry in Ecuador. This is why our facility in Ecuador became one of the first Skretting operations to obtain ASC Feed Standard certification in 2024 as part of our commitment to responsible sourcing. In recent years, Ecuador's shrimp industry has grown significantly, making it the world's largest producer and exporter of farmed shrimp. ASC-certified products are preferred by major international retailers and consumers who prioritise sustainability, opening lucrative markets in Europe, the U.S., and beyond.

ASC certification helps farms comply with international regulations and mitigate risks associated with environmental degradation and social issues, reducing the likelihood of trade barriers or reputational damage. The certification process encourages innovative practices and technologies that improve feed efficiency, disease management, and overall farm productivity.

In the face of increasing global competition, ASC certification provides Ecuadorian shrimp producers with a competitive edge, assuring buyers of a product's quality and sustainability, and justifying premium pricing. It will remain a key driver of commercial success for Ecuadorian shrimp producers.

Complying with European Union (EU) deforestation regulations



The EU Deforestation regulation (EU) 2023/1115 forbids the import, export or placement on the EU and Norwegian market of products defined by the regulation that may originate from deforested land. These are predominantly products derived from soya, palm and wood (packaging materials) and shall not originate from land that was deforested after December 31, 2020. The provisions relevant for Nutreco will enter into force on December 30, 2025.

We see this regulation as a strategic way to create a level playing field within the EU and Norway for sustainable soya, palm and wood products that will have an important impact on worldwide deforestation.

Nutreco is preparing for full compliance by the indicated date, while existing (voluntary) deforestation-free commitments will remain in place under the originally established conditions. The company does this by purchasing only from operators that have performed a full due diligence on the marketed materials to minimise the risks of deforestation after the cut-off date. In cases where Nutreco would trade “relevant” products, they will also comply with the same set of due diligence requirements.



A safe space for everyone:
At all of Skretting's factories, research facilities and offices around the world, we put peoples' health and safety first. Read more about our HSE commitments on the next pages.

Our commitment to safety and well-being

At Skretting and our parent company Nutreco, we prioritise the well-being of our employees, contractors, visitors, and the communities we serve. This commitment is deeply rooted in our core values and our ongoing effort to foster a culture where health and safety are of utmost importance. Over the past year, we have not only sustained but also heightened our focus on creating a safe working environment marked by continuous improvement, trust, and collaboration. By placing health and safety at the forefront of our business operations and decision-making processes, we have made significant progress, particularly in reducing workplace accidents and enhancing the safety skills of our workforce.

Skretting’s key health, safety and environment (HSE) achievements in 2024:

1 Structural enhancement of our HSE organisation:

After successfully implementing our HSE organisational structure, we have continued to foster strong collaboration between Operations and HSE. This has led to shared ownership and the successful implementation of our HSE Standards, which ensure we take a cohesive approach to health, safety, and environmental management across the company.

2 Life Saving Rules implementation:

We have introduced an HSE Standard for each of our Life Saving Rules and are implementing them through a phased approach. So far, all facilities have successfully adopted 50% of these standards, with the remaining 50% scheduled for completion by 2025. This phased approach ensures thorough integration and adherence to safety protocols.

3 Life Saving Rules awareness:

We have continued our Life Saving Rules awareness campaign. During our Global Safety Week, we put particular focus on our “Stop and Take a Minute” initiative, that encourages employees to pause before activities and reflect on whether it is safe to start. This campaign has been pivotal in reinforcing the importance of safety protocols and encouraging proactive safety measures among all employees.

4 Global Safety Week:

Safety Week was celebrated across all our facilities, with the theme “Stop and Take a Minute.” At the global level, we organised workshops and broadcast lectures by Professor Tim Marsh, a leading expert in HSE. We also underscored the critical importance of stopping to take a minute through a corporate video featuring a colleague sharing the story of his life-altering incident.

5 Implementation of HSE management system EcoOnline:

We have successfully implemented EcoOnline as our HSE Management system across the entire organisation. EcoOnline facilitates the reporting of incidents, near misses, recognitions, risk assessments, and Gemba walks. By enabling us to share best practices, manage actions, and conduct trend analysis, it enhances our overall safety performance.

6 NuSAFE Award:

Nutreco recognises the best HSE innovations through the NuSAFE Award. In 2024, Skretting teams not only won the prestigious first-place trophy but also secured third place, highlighting our commitment to excellence in HSE practices.

17%

Decrease in TRCF

Bringing TRCF down to 1.34 per 200,000 hours worked – our third consecutive year of accident reduction – was a testament to our collective efforts to safeguard our workforce and foster a safer work environment.

97%

Training completion

We were pleased to show such a high completion rate on our ambitious plan to offer 8,518 HSE training sessions. This achievement underscores our unwavering commitment to continuous learning and development to enhance the skills and knowledge of our workforce.

71%

HSE audit compliance gaps addressed

By the end of 2024, we successfully addressed the majority of our HSE audit compliance gaps, leaving only 16 open findings. This achievement highlights our commitment to upholding high standards of safety and compliance, and continuously improving our HSE practices.

Upholding strong ethics and compliance standards

At Skretting, while achieving business results is crucial, the manner by which we achieve them is equally important. We uphold a zero-tolerance policy towards any behaviour that contradicts the law, as well as our values and policies.

Throughout 2024, we continued to prioritise raising awareness on Ethics & Compliance topics, ensuring our employees have the necessary knowledge to perform their duties ethically and in compliance with regulations. By the end of the year, approximately 86% of our target audience had completed a training on our Code of Conduct. This figure is lower than the previous year because a large group of employees needed to retake the e-learning training after the two-year validity period expired. We also conducted further risk assessments and training activities, focusing on our Competition Law Compliance, Anti-Bribery and Corruption, Sanctions and Trade Controls and Privacy policies.

In 2024, we also conducted risk-based third-party due diligence and scrutinised material business partners to ensure their codes of conduct comply with Skretting's standards.

In compliance with the Canadian Forced and Child Labour in Supply Chains Act, we published our first annual report for the Canadian entities in May 2024. In addition, we worked hard in 2024 to prepare our organisation for future Corporate Sustainability Reporting Directive (CSRD) reporting on Business Conduct (G1), Own Personnel (S1), and Workers in the Value Chain (S2). These initiatives are instrumental to advancing Skretting's Human Rights risk management.

Skretting maintained its policy of not selling products to Russia, Belarus, and Russian-occupied Ukrainian territories throughout 2024.

We continued to enforce appropriate behaviour across our businesses and at our head office. In 2024, this included investigating 41 cases submitted through our SpeakUp grievance mechanism and taking necessary actions. Of these cases, 20 were related to "HR, Diversity, and Workplace," nine to "Doing Business Fairly," six to "Accounting, Auditing, and Business Reporting," five to "Safeguarding of Assets and Information," and one to "Environment, Health, and Safety."

Anyone – including employees, contractors, former employees, business partners and customers – can raise a concern about inappropriate behaviour in our organisation using the Speak Up Service.

Grounding our double materiality assessment (DMA) in stakeholder input

Nutreco developed its first DMA in 2023, taking into consideration the views of suppliers, customers, employees and public organisations. As internal and external conditions evolved throughout 2024 and 2025, we refined our DMA to provide an up-to-date assessment of the ESG impacts, risks, and opportunities (IROs) relevant to our business.

We plan to refresh the DMA regularly to ensure that material topics reflect the most pressing challenges and priorities for all our operations in Nutreco, Skretting and Trouw Nutrition. While specific issues may evolve over time, several topics are expected to feature prominently in future assessments.

We identified 14 material topics in total, including the two double material topics (priority 1) and six that are building blocks for Nutreco’s sustainability strategy (priority 2). The two identified double material topics form the basis of Nutreco’s integrated strategy and the topics addressed in this Impact Report.

Climate change mitigation and efficient energy use will continue to be key priorities from a supply chain perspective (both in our own facilities and in our value chain). We also remain committed to ensuring health and safety and promoting equal treatment and opportunities for all employees. The sustainable sourcing of marine resources, as well as soy and palm oil, will continue to be critical issues for Nutreco, our industry, our customers, and the planet.

By regularly updating the DMA and grounding it in stakeholder input, we aim to enhance transparency, sharpen our sustainability focus, and drive meaningful impact across our business.

Our double material topics

Through our DMA process, we identified two topics that are double material for Nutreco:



Climate change mitigation



Occupational Health & Safety

Our material topics

Priority	Material topics
1	Climate change mitigation Occupational health and safety
2	Animal health and AMR Extraction and use of marine resources Biodiversity degradation through land-use change Equal treatment and opportunities for all – training and skills development Equal treatment and opportunities for all – Diversity Prevention and detection of corruption and bribery
3	Water consumption in the supply chain Circular raw materials Circular nutrient flows Child labour in the value chain Forced labour in the value chain Animal welfare

Skretting's 2023 Impact Report wins ESG Transparency Award

To acknowledge organisations that are integrating sustainability into their operations and communicating their efforts transparently, EUPD Research has introduced the ESG Transparency Award. This recognition highlights companies that actively embed sustainable practices and share their progress through comprehensive sustainability reports.

Skretting's dedication to these principles in our Impact Report 2023 earned us a spot in the prestigious “Excellence Class” – the award's highest category. Our report was assessed against criteria related to our compliance with regulatory disclosure requirements, alongside key factors such as transparency, environmental stewardship, social responsibility, governance, and overall ethical compliance.

"We have worked hard to position ourselves as a transparent company within our industry, and it makes us proud to see that this is acknowledged by independent parties," says Job van Mil, Sustainability Specialist at Skretting Global. He received the award on Skretting's behalf on December 11, 2024, at a ceremony in Bonn, Germany, that took place in conjunction with European Sustainability Week.



Chapter 8

About Skretting



Our

Vision

To be the number one nutritional solutions partner in aquaculture. We will help customers thrive and will deliver sustainable profitable growth everywhere we play, through a focus on being the absolute best in innovating with impact, customer intimacy and sustainability.

Our

Purpose

Through our purpose of Feeding the Future, we are helping shape a sustainable future for food production globally – it's all about making sure there is enough food to feed the 10 billion people who will be living on our planet in 2050.

Our

Values

The values of trust, inclusivity, curiosity, integrity and passion reflect our purpose of Feeding the Future and underpin our fundamental beliefs and the guiding principles of how we do business.

Our

People

The collective experience, knowledge and talents of our people have helped us achieve considerable success while also progressing the aquaculture industry on a global scale. We strive to be the company where the best people in the industry want to work. We are an equal opportunity employer; people are considered for all roles without regard to race; colour; religious creed; gender identity; nationality; citizenship status; age; physical or mental disability; sexual orientation; marital, parental or military status; or any other status protected by applicable local law.

	ISO 9001	ISO 14001	ISO 22000	ISO45001	GlobalG.A.P.	ASC Feed*	BAP	HACCP	Organic	GMP+	Others
Aquaculture Innovation											ISO 17025
Australia											FeedSafe
Canada											
Chile											RTRS ISO 50001
China											
Ecuador											Naturland Punto Verde (Eco Eficiente, Galápagos)
Egypt											
France											Non-GMO RCNA
Honduras											
India											Halal
Italy											Non-GMO
Japan											
Kenya (JV)											
Nigeria											
Norway											
Spain											Halal
Turkey											Halal
Vietnam											

*Skretting ASC Feed certified feed mills as per May 2025



01	Australia
02	Canada
03	Chile
04	China
05	Ecuador
06	Egypt
07	France
08	Vietnam
09	India
10	Italy
11	Japan
12	Nigeria
13	Norway
14	Spain
15	Turkey
16	Honduras
17	Kenya



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