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### From our CEO

Welcome to Skretting's Sustainability Report 2019. Its arrival comes at what is a very critical time. COVID-19 has taken us all down a pathway that few could have ever imagined, and the likelihood is that the post-pandemic world will be very different to the one that we knew before the crisis began, reinforcing the fact that we need to be aware of not only our environmental, but also our social responsibilities.

While people everywhere continue to face considerable uncertainty and adversity, there have been some important positives to come from this demanding situation. In particular, our bonds to those people and things that are most important to us have been strengthened. We have also seen communities pull together and increase their collective resilience.

Therese Log Bergjord, Skretting CEO



Click here to see a video of Therese Log Bergjord introducing our Sustainability Report Without question, food has had a lead role during these difficulties. It has given us moments to savour with those closest to us; it has brought calm; it has given the energy we need to keep going; it has seen acts of kindness; and it has delivered hope. This prominence has elevated people's appreciation of food, including where it has come from and how it was produced.

As a global leader in aquaculture feed and services,

we are proud to see that we are recognised as an industry that is critical for the functioning of society. Skretting has long been focused on the global challenge of feeding a population that is expected to surpass 9 billion people within the next 30 years in a sustainable way. Built on the widely-held

understanding that fish and shrimp farming should be an increasingly important contributor to healthy food and nutritional security, we provide essential solutions geared towards supporting producers optimise their production in the most cost-effective, environmentally responsible manner possible, while keeping a focus on animal health. We are also working with many farmers to overcome production challenges unique to their operations and location.

Our extensive R&D programme – largely driven by the Skretting Aquaculture Research Centre (ARC) – has led us to expand both our product portfolio and the ingredients we are applying to these diets. With the long-term ambition to reduce the value chain's dependence on finite ingredients like fishmeal and fish oil, we also continue to invest considerable resources into the development and commercial introduction of novel ingredients. It is our belief that these will have a huge positive impact on the aquaculture space in the years and decades ahead.

Meanwhile, through our commitment to planet health, we are more focused than ever on reducing our carbon footprint. As part of our company-wide commitment to have our house in order, we are dedicated to doing more. We will continue to seek further responsible actions and strategies that will reduce our carbon dioxide emissions across all of our operations as well as those resulting from the sourcing of our raw materials.

Aligned with our determination to innovate, we also take great pride in our collaborative endeavours. To drive the sustainability agenda, we are an active member of a number of dynamic multi-stakeholder groups. In partnership, we are doing great work, and collaboratively, we are engaging more and more across the value chain to take traceability and responsible best-practice to

new levels.

It is our ambition

to be the leading

partner in driving

towards an even

more sustainable

the journey

industry

Last but by no means least, it is important to highlight that we are much more aware of the impact we have. This enhanced understanding will help us set much more specific and ambitious targets for the year ahead and beyond. With these targets in place, it is our ambition to be the leading partner in driving the journey towards an even more sustainable industry.

Many of our targets will be informed and guided by our forthcoming Sustainability Roadmap 2025. In turn, it is our belief that these and other actions will help accelerate aquaculture's progress globally – ultimately giving end-consumers greater confidence and accessibility to its products.

home to Demand

Therese Log Bergjord

## About this report



### Our approach

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



### Reporting structure

This global Skretting sustainability report focuses on who we are and our main sustainability achievements in 2019. It is available to our stakeholders and the public on our website. Our focus is to make it easier for readers to locate information that matters most to them. Local Skretting companies can also choose to publish their own sustainability reports to go more in depth on local issues.



### Scope of this report

The quantitative data reported here covers the calendar year from January 1 to December 31, 2019, unless otherwise stated. The report covers all companies that are part of the Skretting division of Nutreco. The Skretting division represents the aquaculture nutrition and service activities of Nutreco. Nutreco is owned by private company SHV, and all public financial information is reported through SHV. This report provides only limited financial information.



### Reporting framework

We prepared our report in accordance with the GRI Standards; Core option. This report also aligns with the United Nations Sustainable Development Goals (SDGs), and throughout we have highlighted how our own goals are aligned with and support the SDGs.



#### Assuring our disclosures

Skretting does not have external verification of the disclosures made in the report. However, Nutreco has worked with an external company to verify specific information disclosed in the Nutreco Sustainability Report. If information disclosed in the current report has been verified during this process, it will be mentioned.



### Other reports

As part the verification for the Nutreco Sustainability Report, the external verification party visited three Skretting locations to assess sustainability data quality and assessed a selected number of sustainability indicators at Nutreco level. Please refer to the Nutreco Sustainability Report and the external report on sustainability data quality for more information.



#### 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.

### Our ambitions

Aquaculture's impact on food production in recent decades has been nothing short of remarkable. Aligned with the rising demand for healthy proteins from a fast-growing global population, it is one of the fastest-growing animal-food sectors, and is expected to provide 110 million tonnes of products by 2030, almost all of which will go directly to human consumption. This is a quantum leap from where the industry was in 1981, when I joined Skretting. Back then, Norway's salmon farmers were producing

just 5,000 tonnes of fish a year. And while there was plenty of ambition, the notion of farming the volumes we are now accustomed to would have been science fiction.

The industry's meteoric rise has not always been a smooth ride. For instance, towards the end of the last century, as the aquaculture volumes grew and the use of marine raw materials as fish feeds increased, so we were the subject of intense scrutiny from the environmental community and campaign groups.

They were questioning, for example, how much wild fish was being used to produce a farmed fish. They also feared where this consumption-growth trend might lead.

While there might be a case for saying that this outside opposition helped shape modern-day aquaculture, putting it on a more responsible trajectory, the fact is that as an organisation, Skretting has always had a sustainability agenda. From the outset, the efficient use of resources has been a core part of our business.

We have constantly sought to use feed raw materials in such a way that we can produce the most amount of feed possible to in turn generate the largest food volume

Skretting has

always had a

sustainability

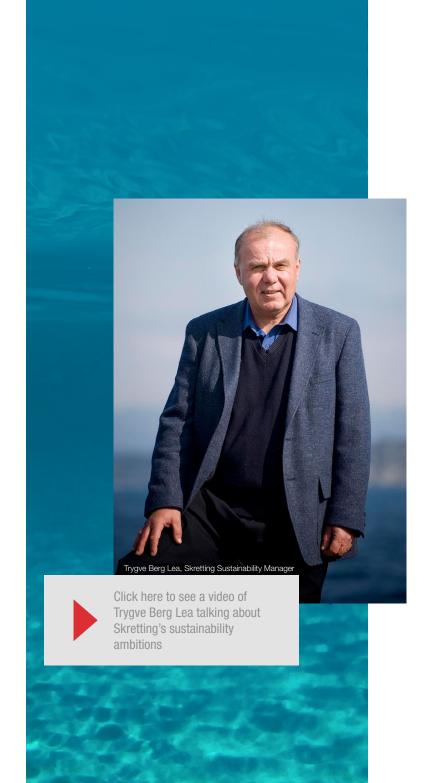
agenda

possible. At the same time and part of the same rationale, we have focused on lowering feed conversion, maintaining and improving fish health where possible so that essential food is not lost through unnecessary mortality events.

These sustainability ambitions have always been with us; they are part of the Skretting DNA, and have led to some of our most prolific R&D programmes and innovative solutions.

Today, for example, we have the ability to be completely independent of marine resources like fishmeal and fish oil should fish farmers and supply chains require it.





We have also established strict sourcing criteria on all of our raw materials. Through our mandate to know where every single feed ingredient comes from and that we only buy from responsible sources, we have developed increasingly sophisticated verification methods.

Quite simply, if a product or supplier fails to meet these thorough evaluations, we don't purchase from them. Of course, that doesn't mean that everything is completely in order today. There is still more that can and will be done, but compared to many other food production areas, these and other sustainability-focused actions have ensured that the aquaculture industry has come a long way.

As our business has grown and diversified – moving beyond salmon to more than 60 different aquaculture species, and encompassing many new geographies – the complexity of our vision to feed a population of 9 billion people in 2050 has become much more apparent.

While we have taken great pride in our ability to overcome challenges through sustainable solutions in the past, it is clear that on a global scale, we cannot do this alone.

We have moved into a new dimension, one where collaboration is fundamental to purposeful progress. We are therefore committed to working with other lead actors and allies in the value chain to ensure aquaculture globally moves forwards, achieving higher standards, providing essential food and livelihoods in the most sustainable manner possible. At the heart of these actions will be our three areas of sustainability: health and welfare, climate and circularity, and good citizenship.









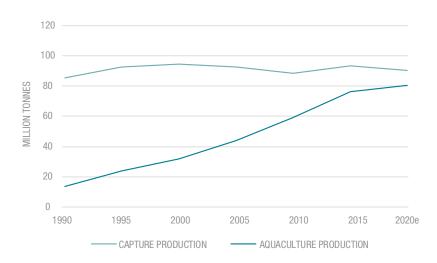
### Putting it into context

Comprising a diverse range of species and products, today's seafood supply chains provide essential nutrition to billions of people around the world. In addition to being the principal source of long chain omega-3 fatty acids, which are central to human health and development, these foods also provide crucial minerals such as calcium, phosphorus, zinc, iron, selenium and iodine, as well as vitamins A, D and B, and vital amino acids like lysine and methionine. We'll touch on this a bit further in the report.

It is widely accepted that even consuming small quantities of seafood can have a significant positive nutritional impact for people of all ages. These health benefits, along with population growth, rising incomes and increased urbanisation have resulted in a strong global consumption trend. According to the Food and Agriculture Organization of the United Nations (FAO), people have never consumed as much fish as they do today. The FAO's most recent data finds that the world consumption has doubled since the 1960s to an estimated 20.5 kg per capita in 2017, and also that the annual global growth in consumption has risen at twice the rate of the population's expansion every year for the last 40 years.

The plateauing of wild-capture fisheries has put a strong onus on aquaculture to meet most of the market's increasing need for seafood products. Again, the FAO has evidenced that the industry is rising to the challenge and growing faster than any other major food production sector. Indeed, the human consumption of farmed fish and shrimp has already eclipsed that of products from wild fisheries and it is projected that by 2030, 60% of the seafood we consume will be farm produced, based on a total global harvest of 110 million tonnes.

At Skretting, we believe there is much more than can be achieved. Despite the clear growth trends, fish and shellfish account for only 7% of the proteins consumed worldwide, while just 2% of all the food that we eat comes out of the sea. This is despite our oceans covering more than 70% of the Earth's surface. Therefore, as we look ahead to the challenge of providing 9 billion people in 2050 with a healthy diet that is produced within planetary boundaries, aquaculture is uniquely placed to be one of the most productive and sustainable food systems for people and planet.



Aquaculture vs capture production. Source: FAO

In 2019, Skretting produced 2.3 million tonnes of feed resulting in

21.5 million seafood meals per day

### Skretting and the SDGs

In 2015, the United Nations introduced a set of 17 Sustainable Development Goals (SDGs) to end poverty, protect the planet, and ensure prosperity for all as part of a new sustainable development agenda. Each goal has specific targets to be achieved by 2030. For the goals to be reached, everyone has a part to play: governments, the private sector, civil society and engaged people like the readers of this report. We believe that in many areas, our sustainability programme is aligned with the SDGs. For example, our mission of 'Feeding the Future' is firmly aligned with fulfilling goal number 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture.

Nuterra is a global sustainability programme implemented across Nutreco, highlighting our dedication and commitment to sustainability.

To a large extent, our sustainability report describes how we work and what we have achieved to support the United Nations in its effort to establish a new sustainable development agenda. The present SDGs are based on our current sustainability roadmap which was created several years ago for the lead up to 2020. We are now in the process of developing our 2025 roadmap which will determine our directions for the years ahead.





































### Progress against the SDGs

SDG	Nutreco objective	Progress	Explanation
3 COCO MEALTH AND WELL-BEING	By 2020, we will contribute to a 50% reduction in antibiotic use in Chile through our involvement in the Pincoy Project.	75%	75% achievement made by 2018; target continues through 2020. Fish remain in water so final results not yet available.
8 SECENT WORK AND SCONEINS CROWNS	By 2020, we will have a total of 5 Community Development Projects in emerging markets that transfer knowledge and best practices to subsistence farmers.	100%	We "re-scoped" from 5 to 2 Community Development Projects. See our Caring communities chapter.
12 RESPONDENT CONCESSION AND PRODUCTION	By 2020, we will have Nuterra Product Assessments for at least four of our new global products (out of a total of six).	100%	Four Product Assessments were conducted; however, Skretting concluded that this initiative did not offer the anticipated value to customers, so it was discontinued.
13 denoted	By 2020, we will launch a Nutreco-wide efficiency programme to encourage our operations to reduce energy and water consumption.	0%	This goal has been postponed. In 2020, Skretting is committing to and implementing Science Based Targets-level energy reduction targets in its operations.
	In 2017 and beyond (through 2020), we will continue to monitor, record and encourage operational actions to reduce the impact through our KPI monitoring programme across all Nutreco companies in scope.	100%	Refer to the "Footprint of our Operations" chapter of this Report for further details.
14 IFF HORS HOUR	By 2020, we will implement a multi-stakeholder fishery improvement project in Peru together with our industry and government partners.	100%	Refer to the "Committed to the Ocean" chapter of this Report for further details.
	By 2020, we will successfully complete the fishery improvement project in Peru.	64%	Refer to the "Committed to the Ocean" chapter of this Report for further details.
15 int on two	By 2020 we will contribute to the development of an industry-based solution to reduce deforestation associated with the primary production of crops.	75%	Skretting has signed the Statement of Support to the Cerrado and is one of three companies to commit funding to the International Fund for Cerrado. This initiative has faced obstacles due to political sensitivities in Brazil and the payment for environmental services (to not convert forest to cropland) is temporarily delayed to 2020.
17 MAINTENHPS TORREGORDS	By 2020 we will be functionally engaged with external partners and platforms addressing specific sustainability issues in Skretting's value chain.	100%	Refer to the Stakeholder platform overview and multiple relevant articles throughout the report for further details.

### Farmed fish represents food and nutritional security

Seafood has an important role to play in human nutrition. With population growth and economic development there will be increasing demand for seafood as part of a healthy diet. Even when consumed in small quantities, fish represents a nutritionally important part of many people's diets, particularly in developing countries. It is a vital source of protein and micronutrients, and improves the quality of protein in largely vegetable and starch-based diets by providing essential amino acids.

Fish is rich in zinc, phosphorus, magnesium, selenium, and contains vitamins A, D and B2 (riboflavin), while marine fish is a good source of iodine and omega 3 fatty acids. Many of these vital nutrients are only found in small amounts, if at all, in staple foods such as maize, rice and cassava which make up the bulk of people's diets in developing countries.

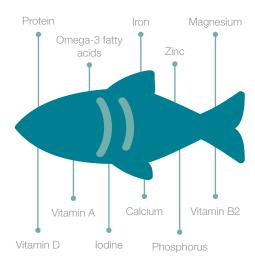
Fish are an indispensable source of these nutrients for many people, and small low-value fish, which are largely consumed by the rural poor, provide more minerals than the same quantity of meat or large fish, as they are consumed whole, with the bones intact. Fish also contain fatty acids that are essential for the development of the brain and body, and are particularly crucial for the diets of babies, children, and pregnant and lactating women.

Consumption of omega-3 fatty acids during pregnancy reduce the risk of low birth weight, which is a key factor in both maternal and child mortality. These acids are also critical for the neurological development of infants, and are found almost exclusively in fish, making the consumption of fish during lactation and pregnancy especially important.

### Fish, human nutrition and the SDGs

Fish as food make an important contribution to the SDGs. While the most obvious contribution is in terms of food security and nutritional security, it also has an important nutritional role in reducing child mortality, improving maternal health, and health in general. Fish also contribute indirectly to several of the other SDGs through improved nutritional status and enhanced livelihoods, and to gender equality through women often being employed in aquaculture production and processing of fish and shrimp.





# Fatty acids for brain and body development



Fish contain fatty acids that are essential for the development of the brain and body, and are particularly crucial for the diets of babies, children, and pregnant and lactating women.

# Reducing the risk of low birth weight



Consumption of omega-3 fatty acids during pregnancy reduce the risk of low birth weight, which is a key factor in both maternal and child mortality. These acids are also critical for the neurological development of infants.

### Transparency and trust

Our approach to food safety and quality has been a key component to allow us to build transparency and trust among the different stakeholders that we interact with in the value chain, and it will keep playing a relevant role in a world where consumers are increasingly concerned about the food they eat.

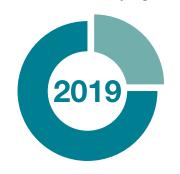
Therefore, our sustainability commitment considers safeguarding human and animal health at the core of our responsibilities, and we choose to work with partners that share our vision that responsible sourcing is not only seen from an economic point of view, but also in connection with environmental protection and social development, including human and labour rights.

Through strong internal and external collaborations and sharing best practices, we combine knowledge and conduct audits to assess risks and ensure our raw materials meet optimal safety and quality standards. This ensures that we can continue to support our customers to produce safe and healthy seafood for the world's growing population.

Therefore, considering the local regulations in the different markets in which we and our customers operate, and whenever the risk assessment defines a higher risk, we buy certified raw materials or encourage and support the suppliers to join improvement programs that allow them be certified on environmental or social standards. We can follow these, and any raw materials. through robust traceability systems that give us detailed information of marine ingredients back to fisheries in order to know if they're responsibly managed, or back to the country of origin in the case of high risk vegetable ingredients like soy, to assess the risk of deforestation.

In 2019 we included sustainability in 75% of our global supplier audits and we have set the target of reaching 100% in 2020. In connection to that, we will keep strengthening the internal procedures of our integrated quality management platform for monitoring the quality assurance and control of our key business processes. Our commitment is to keep working together with key partners across the value chain and always lead the journey towards a more transparent and trustworthy aquaculture industry.

Sustainability targets included in supplier audits







Nutrace® is Skretting's company-wide management programme that ensures feed-to-food quality and safety.

Nutrace was developed to ensure that all potential risks associated with aquaculture feed production are minimised, and that any irregularities are found quickly and acted on. This unique concept allows our customers and end-consumers to have full confidence in the feed used by the aquaculture industry.







Our own

of feed

# 95-99% of carbon footprint

# The footprint of feed

Feed plays an essential role in ensuring the health and wellbeing of farmed fish and shrimp, and can greatly improve the efficiency of the aquaculture process. While gains are made in optimising feed efficiency, feed also contributes one of the biggest environmental impacts.

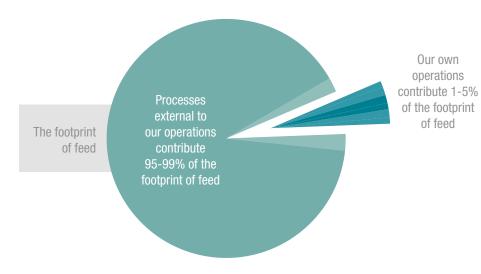
Carbon footprint is an estimate of the climate change impact of activity - for example producing one kilogram of aquaculture feed. Typically, a carbon footprint is calculated by estimating not just the CO<sub>2</sub> emissions that the activity in question causes, but also factors in emissions of other greenhouse gases (such as methane and nitrous oxide) and in some cases other types of climate impacts as well, for example the effect of deforestation. For simplicity, all these impacts are added together and expressed as a single number in terms of carbon dioxide equivalent (CO<sub>o</sub>e): the amount of CO<sub>o</sub> that would create the same amount of warming.

The true carbon footprint of one kilogram of aquaculture feed includes not only the direct emissions resulting from the manufacturing process and the transportation of the feed to the farm.

Freight Ingredient processing Primary ingredients Energy sources Lower emissions Deforestation Technology development Energy efficiency Biodiversity Land use Water use Agricultural practices Fisheries management 1-5% of carbon footprint Factors affecting Feed manufacturing the footprint Energy sources Energy efficiency

It also includes a whole host of indirect emissions, such as those caused by growing the crops used in the feed, processing of feed ingredients, mining activities, production of vitamins, transport of the raw materials and so on. These are just a few of the processes involved. If you think about it, tracing back all the things that have to happen to make that feed leads to nearly an infinite number of pathways. In order to reduce the carbon footprint, we must look for reductions along the whole value chain.

Water use



# The footprint of our operations

As a global leader in the supply of fish and shrimp feeds, Skretting contributes to the aquaculture industry's sustainable progress through the provision of feeds that have been formulated from responsibly-sourced raw materials. An equally important part of this commitment is to ensure that our own house is in order when it comes to the production of these feeds, and this responsibility drives our focus areas of reducing energy use, carbon dioxide (CO<sub>2</sub>) emissions, waste and water use across our operations globally.

We are always looking to minimise the negative impacts of our direct operations and create valuable employment opportunities for the communities in which we operate.

We continue to monitor, record and report on five environmental and social manufacturing KPIs on a quarterly basis. We began to do this in 2016, and now all production sites report through our financial reporting systems. We continue to strive for improvement and share best-practice among our different operations.

Skretting currently operates 33 plants around the world in 17 countries. These are collectively producing 2.3 million tonnes of feed annually. Our footprint is always evolving, with new production facilities under construction and closures or plant extensions underway in most regions. We continually monitor and report four key environmental KPIs, the data quality of which is continuously improved by having a third party taking a critical look at our reporting process.



Water withdrawal



At Skretting, we directly translate our sustainability mantra of "producing more from less" into our operations with a focus on operational efficiencies, particularly in energy and water use and waste products sent to landfill.

In 2019, the energy consumption per tonne of feed was 2% higher than in 2018. CO<sub>2</sub> emissions increased by 4% up to 81 kg CO<sub>2</sub>e per tonne of feed. The increase in these numbers was predominantly impacted by construction works and the shutdown of UK operations.

Water withdrawal increased by 3% to 635 litres per tonne of feed. This is largely due

The figures to the right

Skretting companies per

operational KPIs for

tonne of feed

to reporting framework, which takes into account not only water used, but in addition purified excess that is replaced back into water systems cleaner than when it was removed.

The waste generation of feed was 8 kg per tonne, which was slightly reduced compared with 2018. Waste generation can vary year on year due to irregular activities, such as construction work, maintenance and the cleaning of silos and tanks.

We are confident that investments and changes made in 2019 will result in significant improvements in our environmental footprint in 2020.

Change in KPIs in 2019 compared with 2018

+2%









Energy

CO2



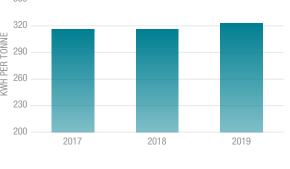


CO<sub>2</sub> emissions

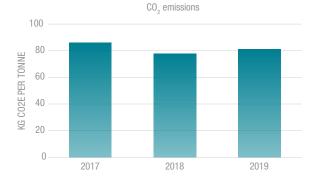
Water withdrawal

Waste generation

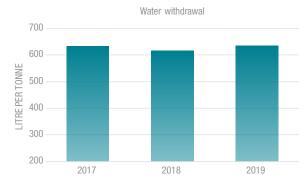


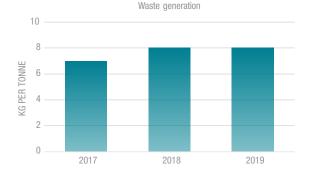


Energy use













### Fjordfrende

Alongside making energy consumption savings on site, we are also focused on reducing the environmental impact of our logistics operations. In 2019, Skretting partnered with Cargill in a new initiative to transport the two companies' Norwegian feed products on the same vessels instead of separately. As well as decreasing shipping traffic and costs, this move has cut the greenhouse gas emissions associated with the transportation of fish feed by one-fifth.

'We have named the collaboration "Fjordfrende", which in English means fjord friend, because it is about working together for fjord friendly transport,' commented Fredrik Witte, Managing Director, Cargill Aqua Nutrition, North Sea.

The two companies believe that over time, the collaboration will create greater efficiencies in transportation and increase the service levels for Norwegian salmon farmers.

The greenhouse gas reduction delivered by the partnership is equal to 7,500 cars, or 15-20 million kg of CO<sub>2</sub> per year.

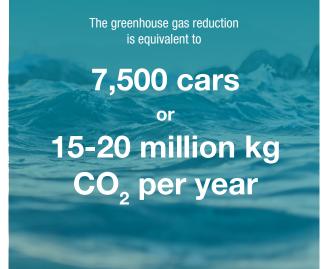
'With this cooperation we will increase the utilisation rate of our fleets and significantly reduce our environmental footprint,' added Witte.

'We are creating an efficient system by optimising capacity over time, giving aquaculture a better distribution model. Load capacity will be better utilised, there will be shorter sailing distances and investment opportunities will increase,' said Erlend Sødal, former Managing Director of Skretting Norway.

In future, investments in new feed vessels will contribute to a better adapted and multifunctional feed fleet, while the emissions of greenhouse gases will be reduced.

One fleet serving both parties will not only maintain today's level of service, but also form a better basis for innovation and development.











### Operational sustainability highlights 2019



### Rethinking plastic in Ecuador

Increased awareness of the threat that discarded plastics place on our planet has led sustainability-focused businesses such as ours to be increasingly mindful of the impact that our operations have on the environment. At Skretting, this consciousness continues to inspire new initiatives, with one of the most recent and potentially far-reaching schemes being launched by Skretting Ecuador.

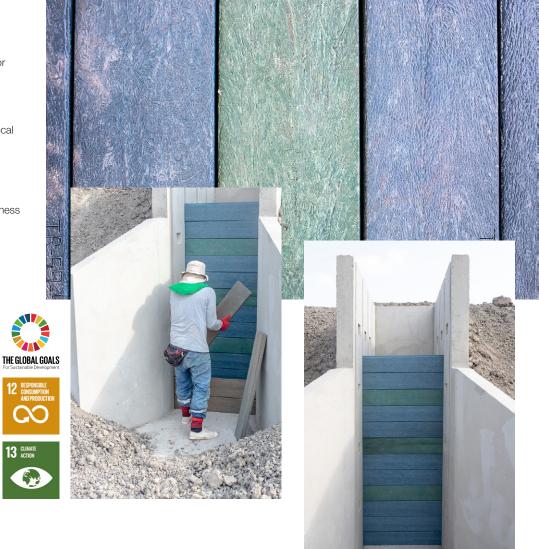
As one of the world's most important shrimp-producing nations, Ecuador uses a lot of our feed. To ensure the used polythene bags that previously contained these diets can be re-purposed in the most responsible manner possible, we have entered into a collaboration with plastics companies Soluciones Pro Medio Ambiente Prambi SA and Nutec Representaciones SA.

Together, we devised a unique circular economy strategy whereby the same logistics providers that distribute our shrimp feeds collect the empty bags as well as any other plastic waste generated by the farms and bring it all to our facilities in Duran.

After sorting, Nutec converts any waste into raw materials for other industries, while Prambi upcycles the old bags into boards which are then used as floodgates at shrimp ponds. Traditionally, floodgates are made of wood and have a short lifespan due to the inclement weather.

In lasting five-times longer, the recycled plastic boards equate to a significant economic saving for the shrimp farmers. Using them also results in reduced deforestation, with the calculation that for every 1,000 hectares of shrimp farm, 67 trees are cut down just to manufacture wooden floodgates.

As well as providing the motivation for local shrimp producers to reduce the sector's environmental footprint, this scheme also intends to inspire other industries in Ecuador and beyond to take a greener, more responsible approach to their business activities.







### Caring for people

Our people are central to our global mission of 'Feeding the Future'. To fulfil this promise, we need a driven and passionate community of people: people who work together across borders; people who know that "we" is more powerful than "I"; and people that understand that the best solutions are found when they openly collaborate. These people will drive our innovation agenda and also help us act as a responsible and creative business leader.

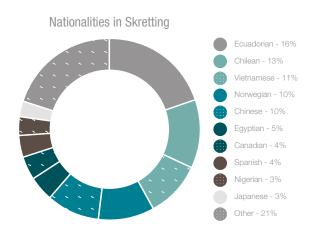
As Skretting continues to evolve – looking beyond feed for new business opportunities, we will increasingly also put together more creative, cross-functional teams, and introducing new skill sets and ways of thinking in order to be competitive in the market place.

To ensure that we continue to be in the best position to attract top talent and to help those individuals and our operations to reach their full potential, we are committed to providing an environment that is rich in diversity and fully inclusive.

In recent years, some important initiatives have been implemented that are enhancing our diversity and inclusion (D&I), including a Taking the Stage programme that empowers female colleagues in the workplace.







### Safety First Programme

Health and safety is at the core of our focus. Its importance is made clear in the Nutreco Health, Safety and Environment (HSE) Policy. The rules and standards derived from this policy, which apply to all Skretting operations, are mandatory, without exception.

In 2018, the company's rate of injuries increased and the corporate HSE team was tasked with helping to find ways to reverse this trend. A safety culture programme was developed for Nutreco in cooperation with other companies in the SHV group. This programme was approved by the Nutreco Executive Committee in January 2018.

In 2019, the safety culture programme continued with the roll-out of new 'life-saving rules'. Eight life-saving rules were defined by corporate HSE in order to control the high-risk activities taking place in Nutreco. In Q1 and Q2, life-saving materials including videos and posters were created for each rule. This work will continue into early 2020 and will include the launch of a new life-saving e-learning tool. In Q4, the third global safety week will be organised in cooperation with other Nutreco companies.

The programme has already had a significant impact, with lost time injury incidents falling from 49 in 2018 to 21 in 2019, representing a reduction of 58%.



While these continue to bear significant fruit, we also recently embarked on a new initiative to map the status of relevant D&I parameters and identify possible shortfalls across our business, on a region-by-region basis.

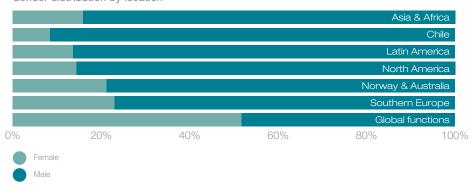
Initially, the focus will be on ascertaining how we are performing with regards to gender. Subsequent investigations will also look at nationality and thinking styles.

Findings will feed into and shape new action plans that will be tailored to meet each region's local needs and regulations in order that each of our OpCos can take full ownership of their programme and generate awareness about it.

In the meantime, some KPI decisions have already been taken with regards to the minimum level that women should be recruited as new hires and in senior executive openings, and a suite of new tools will be provided to facilitate these appointment strategies and for the other reasonable but ambitious D&I goals.

"The way that Skretting is expanding globally gives us a fantastic opportunity to bring new talent into the company and to establish a very positive gender balance. As we continue to progress, we will need greater diversity in our ranks. This will include more people joining us from fields outside of aquaculture, who will further enrich our culture and business through their different backgrounds, experiences, thinking styles and ideas," says Solveig Holter, HR Director at Skretting.

### Gender distribution by location













## Human rights

Human rights are the basic rights and freedoms that belong to every single person in the world. Protected by law, they are based on important shared principles like dignity, fairness, respect and equality. Many of these principles are also designed to protect people within the workplace.

#### Human rights within Skretting

In 2019, Skretting and Nutreco launched a new Code of Conduct for all employees. This Code of Conduct defines what we believe is the right way to do business. It covers many areas, including clearly stating our companywide policies for human and labour rights. The new Code of Conduct replaces our former Code of Ethics and is aligned with the Ethics & Compliance ambitions of our parent company SHV.

Here are they key human rights principles underlying our Code of Conduct:

- We are committed to providing a safe, collaborative and inclusive workplace environment where employees and business partners are respected and appreciated
- We do not discriminate with regards to gender, race, religion, age, disability, sexual orientation, nationality, political opinion and social or ethnic origin
- We give all equal opportunities as we recruit, treat, promote and compensate

- employees and job applicants based on merit, qualifications and job-related performance
- We seek to provide a working environment that is free from harassment and disrespectful conduct. Harassment includes unwelcome verbal, visual or physical behaviour that creates an intimidating or offensive environment
- We respect every employee's right to join a trade union or to have recognised employee representation in accordance with the law. We also recognise the right to engage in collective bargaining
- We will not use child labour or any other form of compulsory labour. The minimum age for entering into employment or working should not be less than the age for completion of compulsory schooling as provided by national law and, in any case, should not be under 15 years old
- We comply with the International Labour Standards. All of our employees are entitled to the legal minimum wage, as published by the government in the countries where we operate
- We are committed to safeguarding the health and safety of our employees and visitors. All of our employees must adhere to the Nutreco HSE Policy, Standards and Procedures



### Ethics & legal compliance

At Skretting, we use both internal resources and external consultants to ensure full compliance with all legislation governing our activities. Skretting employees undertake a mandatory training module on Nutreco's Code of Conduct.

We also have a whistleblower 'SpeakUp line', enabling our people to effectively report and discuss any questions they may have anonymously and securely.

New policies introduced since 2018 included Third Party Due Diligence, Anti-Bribery and Corruption and Trade Sanctions & Export Controls.













### Human rights in our value chain

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

Adverse human rights impacts can occur at any level of a supply chain – from the first tier of direct or strategic suppliers, all the way down via multiple layers of sub-suppliers and sub-contractors, to those providing the raw material inputs. To meet our responsibility to respect human rights, we are committed to understanding all of the human rights risks at all levels of our supply chain – not only in the first tier.

At Skretting, we give high priority to helping to ensure decent working conditions and also to promote fundamental, universal workers' rights. Providing decent working conditions is a fundamental goal in itself, but it is also crucial for a socially sustainable world economy. The minimum requirements for workplace rights that are to be respected fall into four main categories: freedom of association and the right to collective bargaining, the abolition of child labour, the elimination of forced or compulsory labour, and the elimination of discrimination. Efforts to combat child labour are especially important for us. Combating forced labour is another priority area.

Skretting has developed a Supplier Code of Conduct that demands our suppliers respect basic human and labour rights in their operations. We also encourage our suppliers to make the same demands of their suppliers. Furthermore, each year, we conduct about 15–20 sustainability audits. The audit checklist incorporates a number of evaluations about human rights issues such as child labour.

# Caring for community

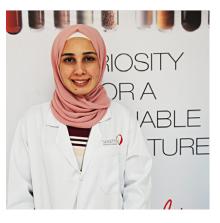
Support of the local communities will secure the long-term prosperity of Skretting. Our policies and practices can create economic value in a way that also creates value for society by addressing its needs and challenges. Support of local communities can be helping schools, support kindergartens and many other social activities. It can also mean support of local industry by engaging in developing local feed raw material sources.



# Training and employment for girls and youth in Egypt

In 2019, Skretting Egypt collaborated with the Sawaris Foundation for Social Development and the embassy of the Netherlands to train and employ 400 women and youth. At Skretting Egypt, the participants were trained on quality and laboratory analysis, production process, purchasing, sustainability and how we live our values in Skretting.

The project has a key focus on encouraging girls' rights to education and skill development, and eight employees from Skretting were involved in the project in 2019, including General Manager Ayman Rostom.



### Giving back: Skretting Vietnam gets kids to school

For the ninth year in a row, in 2019
Skretting Vietnam continued with
the 'Skretting gets kids to school'
programme. The team delivered nearly
1200 gift packs to children in more
than 10 farming provinces nationwide,
together with local government officers,
customers, teachers and pupils. This
year, the gift pack included backpacks,
notebooks, pens, water bottles and hats
to ensure kids had their much-needed
supplies for their new school year.

The programme is not only about giving gifts and playing games but also about raising the awareness of parents and kids about the environment, with the gift packs delivered in recycled Skretting feed bags.

"This is an annual activity for Skretting Vietnam to show our commitment and support for Vietnamese farmers and the local communities," says Van Thuy Nguyen, Skretting Vietnam Marketing and Communication Manager. "This initiative fits very well with our mission of 'Feeding the Future'."



# Helping youth and colleagues realise their dreams in Ecuador

Like all of our Skretting companies, the team at Skretting Ecuador has a strong commitment to the wellbeing of each of its workers and their families, supporting them through education in various contexts. As part of the emphasis on education and family care, in 2019 the team held a workshop for kids between 12 and 18 years old to share experiences and discuss life goals and how to combat the obstacles that arise in order to achieve their dreams.

Within the same project, the team continued with the 'Big Brother' program, whereby employees sponsor colleagues and support them to finish their studies. The study expenses are covered by the company. The first batch of four graduates completed their studies in 2019, something we're very proud of!







# Making ponds more profitable for catfish farmers in Nigeria

Since 2015, we have partnered with Nutreco on the Catfish Sustainability Project (CSP) in Nigeria, working to enhance the production, profitability and environmental sustainability of catfish farming in the Ibadan region, while empowering small farmers to raise themselves out of poverty.

The CSP is funded by Nutreco and Skretting Nigeria and facilitated by the Ibadan Justice, Development and Peace Commission.

In 2019, 227 new farmers joined the project, bringing the total number to 485, clustered into 28 groups that learn from each other and share best practices.

Over the course of the year, we helped farmers integrate best management practices and improve the sustainability of their businesses through training, advisory services and learning visits.

A total of 60% of the farmers were found to be fully compliant with the trainings, leading to an improved fish survival rate of 93% in 2019, compared to 65% in 2016.

Participating farmers have been able to maintain or improve their incomes, with the average profit per farmer increased from 11% in 2016 to 27% in 2019.

New groups of farmers increased their profit margins from 0-5% to 14%, while groups that had been in the program longer were able to maintain an average profit margin of 33% in 2019.

As a result of their experiences through a learning visit to Hyfar Farms in Ogun state, three groups have decided to open four fish marketing outlets.

The training on cooperative management, savings and credit the farmers receive through the project has helped them form cooperatives. Today, at least 190 farmers can access credit facilities from their groups, giving them essential support as they build their businesses.

The project still faces challenges, including

Average profit per

from 11% in 2016 to

farmer increased

27% in 2019

the poor quality of catfish seedlings, insufficient funds under microfinancing for farmers, a low selling price of table-sized sized

(850-1000g) fish and diseases caused by poor and inadequate water supply during a prolonged drought in the area.

In 2020, we will focus on adding even more farmers to the program, with the aim of 700 participants by the end of the year. The farmers will also establish a cooperative group to provide a united force in determining the market price of catfish. The team plans to incorporate market-oriented innovations, such as the production of value-added products and the use of online marketing tools, to improve profitability.









"My participation in the catfish sustainability project of JDPC/Skretting has brought convenience and profit to my business compared to the method used before."

Ayoade Adelabu Agbejoba Fish farmer group Apete, Ibadan "Since the adoption of best management practices, serial disease outbreak has been controlled on my farm. For example, a present batch of fish are three months old in the pond without a single incidence, which is not normal in my operation before, as a month hardly passed by without an outbreak."

Ibitomosin Joshua Greenleaf group Oroge, Ibadan

0.9 1.204a Feed conversion ratio Average harvest weight (kg) 1.2 0.89 Survival rate (%) 90 93 2 3 2-3 Production cycle per year % Average profit per farmer (N) 28 27<sup>b</sup> Growth rate/week (g) 48.5 43.42° 65.45 Average body weight at stock (g) 51.86

- a The feed conversion ratio was higher as a result of the increase in the use of a cheaper variant of Skretting feed (compared to previous years) among farmers
- Reduced percentage of average profit per farmer was due to a drop in the market price of catfish in 2019
- c A reduced growth rate was caused by general disease outbreaks coupled with poor water quality/low rainfall

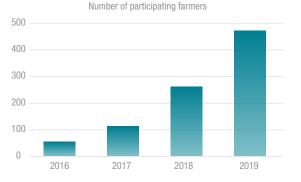


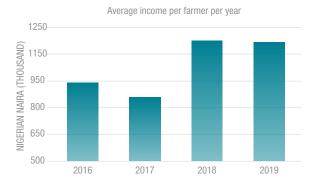
This project is conducted in collaboration with Justice Development Peace Commission (JDPC), Ibadan











### Helping small-scale tilapia farmers satisfy Zambia's appetite for fish

In Zambia, in south-central Africa, more than half the population lives below the poverty line. Aquaculture is an important sector of the country's economy, and Zambians get a high percentage of their protein intake from fish.

Of the 40 farmers

The project we are running is focused on helping smallholder farmers in the Mpulungu region improve

their livelihood. It is an inclusive project, with 45% of participating farmers being female. Women play an important role in the livelihood of most households, so it was important to have their participation.

The team working on the project has delivered good results for the community so far. Farmers have adopted methods for improving their businesses through the program, including consistent record keeping, regular sampling and the importance of using good fingerlings. Skretting has provided quality feed to ensure good results, with the benefits clearly seen by the farmers.

Kalugwisha Astridah, one of the women participating said, "I didn't know that there was such a thing as sex-reversed fingerlings [a common practice in tilapia farming, because male tilapia grow faster than females]; this has changed my farming practice."

The project has also had its challenges. These included the use of some slow-growing fingerlings, a low survival rate of 69.9%, a drop in market price and low profitability. The remote location, which led to transport challenges during the harvest, also impacted results. Four farmers incurred losses due to flooding during the rainy

involved, 45% are

women

season, when their ponds were washed away.

The team is always looking to build on its successes and improve how it

handles challenges. We are also looking for more partners for future projects in Zambia, including NGOs for technical support, agrodealers for feed distribution and government officials for closer collaboration.









### Acqua in Bocca!

In 2017, Skretting Italy started a stakeholder engagement project aimed at creating shared value using sustainability as a leverage. The initiative revealed a need to improve and coordinate the communication initiatives of the different stakeholders in the supply chain (feed producers, farmers, suppliers, distributors) to fight fake news and improve the perceived value of Italian aquaculture products among local consumers.

After running different initiatives and public events, the project had an important highlight in late 2018 with the launch of "Acqua in Boccal" communication kit, a practical handbook designed in collaboration with stakeholders aimed at closing the information gap between the industry and consumers through frequently asked questions on aquaculture in areas like human nutrition, sustainability, animal welfare and innovation.

"After two years of collaborative work with relevant players in our value chain, including NGOs, retailers, chefs and journalists, we have seen that some of our customers are already experiencing better commercial results, whereas others are using the kit with their own customers.

"We're confident that "Acqua in Bocca!" will keep supporting the aquaculture industry in Italy by helping farmers to better communicate the value of their products. For us it is a way to be perceived as a real partner, able to create shared value," says Umberto Luzzana, Skretting Italy's Marketing Manager.

Marco Gilmozzi, President of the European Federation of Aquaculture Producers (FEAP) has been part of Skretting Italy's Acqua in Bocca programme from day 1.

"In Acqua in Bocca, Skretting Italy has delivered a very helpful manual for fish farmers that, probably for the first time, allows them to explain to people what our industry is and does in an easy-to-understand way. It also provides answers to key questions that might be asked by customers, journalists and the general public. I have asked Skretting to find a way to distribute a version of Acqua in Bocca to all European farmers, so that we may together build a common and shared vision on all the major points of our business."

After the positive results seen in Italy, in 2020 Skretting will organise an internal workshop with other operating companies interested in exploring this approach and adapt it to their own local realities.

"Acqua in Bocca!"
provides answers to key
questions that might be
asked by customers,
journalists and the
general public







### Planetary challenges

We are part of a rapidly changing world. A fast-growing population that is becoming increasingly mobile and urbanised is transforming our planet at an unprecedented rate, and creating significant consumption challenges in the process.

Already, the incremental demand for food, fresh water and energy is putting a strain on some traditional, finite resources, and with the expectation that the global population will surpass 9.1 billion by 2050, the United Nations Food and Agriculture Organization (FAO) has predicted that current agricultural systems will not be able to supply enough food for everyone.

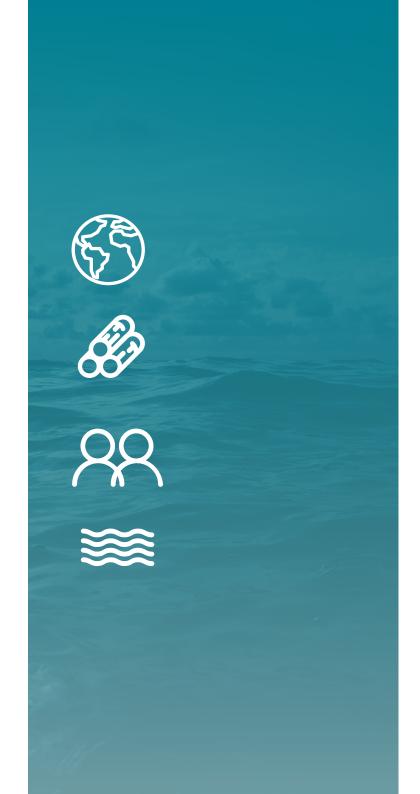
Meanwhile, the increased human activity is warming the planet. Indeed, 2019 was one of the hottest years on record, and the last decade was the hottest for 150 years. Furthermore, scientists have evidenced that the carbon dioxide level was the highest it had been for millions of years. Not surprisingly, we are seeing the influence of global warming and the climate change all around us – especially in the natural world.

Eventually, rising temperatures and extreme climate shifts could have a significant impact on crop yields and therefore food prices, and this in turn could threaten poorer communities.

At the same time, coastal areas will become increasingly susceptible to flooding and erosion as sea levels rise.

As a responsible global business, Skretting recognises that we must continue to innovate to enable the aquaculture industry and seafood supply chains to keep pace with the food demands of the future in the most pro-planet manner possible, including a focus on the protection of endangered species and sensitive ecosystems. With the understanding that we need to be more productive with less resources, we are proudly committed to applying new costeffective and sustainable technologies to our products.

To further reduce our impact on the natural world, we are also focused on cutting emissions and using energy much more efficiently. Additionally, to generate sufficient momentum to truly benefit society, we are increasingly encouraging and working with others within our supplier and customer networks, and also the broader aquaculture space, to adopt similarly proactive approaches within their own businesses.



### Deforestation

At Skretting, we want to ensure we only purchase vegetable ingredients that have been cultivated by farmers who have not contributed to deforestation, protecting sensitive ecosystems and endangered species. In practical terms, this requires our procurement teams to have clear sourcing guidelines, including crieteria on how the plants are cultivated.

Compiling such criteria is not easy. Indeed, defining what is a forest and what is deforestation is complicated. This is because forests come in numerous forms, varying in composition, biophysical characteristics and the diversity of flora and fauna, among many other traits.

In addition, there is zero deforestation and zero net deforestation. Zero deforestation means no forest areas are cleared or converted, while zero net deforestation allows for the clearance or conversion of forests in one area as long as an equal area is replanted elsewhere.

Although many companies are addressing deforestation, corporate policies often tackle more than the activities related to the clearing of forests. They also detail other important elements of production that go beyond deforestation. For example, they might include no clearing of high conservation value (HCV) areas, respect for indigenous land rights, obtaining free, prior and informed consent from local communities, no use of forced or slave labour and commitment to transparency regarding production practices.

In many cases, some deforestation under certain conditions is also made legal by governments. As a company, this raises the issue of whether we should set our sourcing guidelines higher than the legal bar; and if so, how do we define these requirements?

The challenge is further exacerbated by the numerous practical challenges that would prevent processing value chains from meeting several different criteria.

Another area of contention is how far in the value chain can, and should, Skretting take responsibility and enforce its requirements?

While continued deforestation when alternative options are available is not readily justified by society at large, there is a valid ethical debate questioning why developed countries should be able to ask countries with emerging economies to stop behaviour that developed countries actively participated in centuries before. This is not an easy question to answer.

### Skretting supports









**Zero deforestation**no forest areas are cleared or converted



Zero net deforestation clearance is permitted, coupled with reforestation



#### A conservation mechanism for the Cerrado

This effort has

been designed

soy-associated

deforestation in

to help end

the Cerrado

In late 2019, we became the first feed company and one of only three private sector stakeholders to-date to provide crucial, long-term financial support to the Funding for Soy Farmers in the Cerrado initiative. This important international effort has been designed explicitly to help end soy-associated deforestation in the Cerrado, a region that covers a quarter of Brazil's landmass, and one of the country's most important areas for both

biodiversity and freshwater production.

Working alongside retail company Tesco and the Norwegian salmon farming company Grieg Seafood, we will strive to halt further deforestation in the Cerrado. In doing so, we also hope to

help conserve its fragile plant and animal life. Because regulations alone are not sufficient to protect the region's biodiversity, this will be achieved by incentivising farmers to produce soy only on existing agricultural land and to leave remaining forests and other important native vegetation untouched.

Funding will also support the sensitive Cerrado biome in becoming a verified zero deforestation area for soy. With approximately 250 million tonnes of carbon being released annually from this landscape through deforestation, preliminary studies have ascertained that around US\$ 250 million is needed to reach this goal.

Brazil's soy industry has been invited by the Funding for Soy Farmers in the Cerrado initiative to lead the development of a financial mechanism that best distributes the funds to meet this ambition.

Our commitment to this strategy, including the pledge of €1 million over the coming five years, recognises that while soy is a key ingredient in aquaculture and animal feed production, it's also critical that landowners

act responsibly and contribute to the protection of critical environments. It also underlines our longstanding support of the Cerrado region. This includes being one of 23 founding signatories of the Business Statement of Support to the Cerrado

Manifesto, a commitment to working with Brazilian stakeholders to halt deforestation in the region that was established in 2017. Today, more than 140 companies have signed this statement of support.

It has been estimated that there are more than 20 million hectares of existing agricultural land suitable for soy expansion in the Cerrado. Expanding into these areas rather than newly converting native vegetation presents a much more realistic and sustainable pathway for the sector's development.







# Skretting Chile creates first national aquaculture forest

A new forest was planted by the Skretting Chile team in recognition of the loyalty that many aquaculture producers throughout the country continue to demonstrate for our suite of products and services.

Named after our global sustainability programme, the Nuterra Forest, located at the Dos Lagunas National Monument in Coyhaique, is set to provide a home to 1,500 native trees. Every new tree planted acknowledges the support received from one of our customers or collaborators, with each of these partners receiving the geolocation of their tree.

This first-of-its-kind initiative is intended to echo the increasingly responsible approach being taken by our customers to farm seafood, and to also signify the contribution that Skretting is endeavouring to make to the sustainable advancement of aquaculture supply chains.

Furthermore, with land-based farming becoming more commonplace in aquaculture supply chains, thanks to new technologies and the advancement of recirculation systems, it's also another opportunity to compensate for the industry's footprint.

The Nuterra Forest project has been made possible with the assistance of the non-profit organisation Fundación Reforestemos.

### WATER CYCLE



of the fresh water consumed in the world comes from forests

#### BIODIVERSITY



of terrestrial biodiversity is supported by forests

### CLIMATE CHANGE



of annual CO2 emissions worldwide are absorbed by forests

#### SOILS



Forests constitute a protective barrier of soils against erosion



### Aquaculture dialogue advances Brazil's sustainable soy agenda

Putting competitive differences to one side, in another initiative Skretting and fellow salmon feed producers Cargill Aqua Nutrition, BioMar and Mowi have joined forces with certification organisation ProTerra and a number of soy producers to ensure value chains are able to take a responsible approach to sourcing soy from Brazil.

Called the 'Aquaculture Dialogue on Sustainable Soy Sourcing from Brazil', this new roundtable group recognises that Brazilian agriculture practices and deforestation have come under intense environmental scrutiny, and also that with salmon feed often containing soy products from Brazil, these concerns could have implications for aquaculture supply chains.

While Europe's salmon feed producers only purchase certified deforestation-free soy from Brazil, the partners have identified that in the best interests of our planet's health and to help tackle the climate crisis, collaborative

action is required in a number of key areas within the soy production sector. These include traceability, transparency, supplier code of conduct and deforestation.

Already, the dialogue group has put a new traceability system in place

Already, the dialogue group has put a new traceability system in place. Through this platform, each shipment delivered to feed

producers now includes information about the municipalities and states from which the soy from that batch is sourced.

This provides the means for us to quickly determine whether a farm is fully compliant with supply requirements and is also carefully abiding by all environmental, labour and human laws.

Through these new changes, it has been possible to establish long-term sustainable purchasing and supplier policies that prohibit the sourcing of soy products from land areas that are illegally deforested. Looking ahead, the group has also stated that it would welcome initiatives that move beyond a supply chain approach, to drive a forestpositive future.











### Supplier case study: CJ Selecta's seven steps to heightened sustainability

Throughout the past decade, South Korean soy processor CJ Selecta has focused on the protection of Brazil's natural resources, particularly those in the Amazon and Cerrado biomes. Sourcing non-GMO certified soy, produced in compliance with international environmental and social standards, has been central to this strategy.

Amid ongoing socio-environmental discussions surrounding the soy industry and the growing global demand for sustainable products, the company has selected seven targets that it maintains will collectively deliver a framework for enhancing the sustainability of its operations and activities in the coming years.

Based on analysis carried out during 2019 to identify sustainable development objectives, these targets are:

- Establish a sustainability department tasked with developing the company's sustainability strategy (achieved in 2019)
- Stop sourcing soybeans from the Amazon biome by
- Have 100% of farm areas audited by 2022
- Publish its first Global Reporting Initiative (GRI) annual report (due in 2020)
- Implement an indicator for greenhouse gases (GHG)
- Reduce its carbon footprint
- Maintain its support of effective strategies against deforestation in the Cerrado biome

Through these measures. CJ Selecta believes that it's moving in the right direction and will also be able to meet future market requirements with regards to increased transparency, improvements in environmental actions, and innovation in production areas, as well as providing open communication to clients, partners and society as a whole.





### Committed to the ocean

The ocean is at the heart of our planet. Responsible for regulating global climate, temperature and weather patterns, as well as producing 70% of the oxygen we breathe and absorbing more than 30% of manmade carbon emissions, it is responsible for almost all life on Earth.

While it provides rich habitat for so many known marine animal and plant species, with many more varieties still to be discovered, the for healthy ocean also requires very careful protection. A crucial part of this is ensuring that those fish stocks that are caught for direct or indirect human consumption are fished responsibly – within clearly defined sustainable limits.

Global demand for healthy seafood proteins continues to rise at a rapid rate, and with capture fisheries only capable of contributing modest additional volumes, it is up to aguaculture - one of the fastest-growing food production sectors - to meet most of the market's increasing needs.

The expectation from the Food and Agriculture Organization of the United Nations (FAO) is that total fish production will reach 201 million tonnes by 2030, compared with 171 million tonnes in 2016.

To achieve this, the aquaculture harvest will increase from 80 million tonnes to about 110 million tonnes, while capture fisheries production will remain at around 91 million

the platform from which fish and shrimp farmers can elevate their production levels

Global demand

seafood proteins

continues to rise

at a rapid rate

in the most responsible thereby increase both food To ensure there is no on the ocean, we continue into the development and

application of alternative feed ingredient solutions.

At the same time, with the understanding that by adopting best-practice it is possible to farm seafood in ways that have very little environmental impact, we will work even closer with producers and other stakeholders to implement improvements to farming systems globally and to also safeguard ocean health.

tonnes. At Skretting, we are committed to providing

> manner possible, and and economic security. additional burden placed to invest considerable R&D





### Signing the UN Global Compact on sustainable oceans

In October 2019, Skretting became an early signatory to the United Nations Global Compact, Sustainable Ocean Principles, calling on companies around the world to commit to securing healthy and productive oceans. By signing up to the compact's nine core principles, we are committed to taking action to prevent pollution, to manage our use of marine resources to ensure long-term sustainability, and to be transparent in our ocean-related activities and impacts.

Parent company Nutreco has been a member of the UN Global Compact since 2015.

Our endeavours and ambitions – many of which encompass collaborative, multi-stakeholder undertakings – have also been recognised by the World Benchmarking Alliance (WBA). In WBA's new annual Seafood Stewardship Index, Skretting was ranked as one of the top companies in its list of the 30 most influential seafood businesses, based on the commitment. transparency and performance to meet the UN's Sustainable Development Goals (SDGs).

To drive further innovation in our industry and to ensure the world's growing population has easy access to more sustainable, healthier and safer seafood, we will strive to identify new key action areas and align those closely together with customers, suppliers and partners.

# Supporting fishery improvement projects (FIPs)

Great strides have been made by the aquaculture industry to improve its responsible practices in recent years, with substantial efforts particularly focused on encouraging marine ingredient suppliers to ensure that they source raw materials from well-managed, sustainable fisheries.

A large number of fisheries in Europe and the Americas today are certified to the MarinTrust standard. Skretting has the ambition to source from only MarinTrust-compliant fisheries, and we support fisheries to embark on improvement projects so they can become certified according to the MarinTrust standard.

Currently, Skretting is engaged in three fishery improvement projects (FIPs). One of the most important fisheries in the world, the Peruvian anchovy fishery, is engaged in a FIP to achieve a "certifiable status" according to the guidelines of the Conservation Alliance for Sustainable Solutions (CASS).

At the meeting held in November 2019 in the FIP Working Group, Instituto del Mar del Perú (IMARPE) representative, Dr. Jorge Tam, presented on the advances of the ecosystem model to understand the trophic impacts of the fishery. The presentation showed a great degree of advancement, but more work is yet to be done. IMARPE scientists expect to have completed this by the beginning of January 2020 with a report to follow.



#### Peruvian anchoveta FIP

In 2019, according to rules established by FisheryProgress.org, the FIP entered its third year and was therefore audited. FishChoice undertook the audit of this FIP in 2019. Work remains to fulfill Marine Stewardship Council (MSC) requirements related to the standard point 1.2.1 about Harvest strategy. When this work is completed, the Peruvian anchoveta fishery will have been successfully benchmarked against the MSC Certification. It will then be up to the Peruvian fishing industry to decide to conduct an actual certification process or not.

# MarinTrust improvers programme in Ecuador

A group of 18 Ecuadorean fishing and processing firms, together with three international feed producers, have committed to carry out a FIP for small pelagic resources. The participating international feed producers are Skretting, Biomar and VitaPro Ecuador.

The companies involved represent about 80% of the country's small pelagic fishing firms, active both in the production of fishmeal and of frozen and canned products for direct human consumption. The improvement project is part of the MarinTrust Global Standard for Responsible Supply fishery improvers' programme, which allows producers of marine ingredients to demonstrate their commitment to improvement towards responsibly sourced raw materials.

# FIP in Vietnam's Vung Tau region

Skretting Vietnam, together with fishmeal producers, governmental agencies and other aquaculture feed producers, continues to engage in a FIP in the Vung Tau province in Southern Vietnam. The aim of this project is to improve the fishery management of the Vung Tau province mixed trawl fishery over a five-year period to a level where it can meet the requirements of the MarinTrust standard.

MarinTrust has formally launched its multispecies criteria to be tested during the next three years with relevant fisheries such as mixed trawl fisheries in Southeast Asia. During this period, the pilot will work as part of the MarinTrust Improvers' Programme (IP).

### SeaBOS cooperates with the Global Dialogue on Seafood Traceability

Skretting is a founding member of the sustainable body Seafood Business for Ocean Stewardship initiative (SeaBOS), which represents 10 of the world's largest seafood companies. All of these member companies are aligned in the mission to lead a global transformation towards sustainable seafood production and a healthy ocean.

In 2020, an important undertaking by SeaBOS will be to complete a rapid assessment of how the new 'GDST Standards and Guidelines for Interoperable Seafood Traceability Systems, Version 1.0', developed by the Global Dialogue on Seafood Traceability (GDST) to track seafood products from point of origin to point of sale, can be applied to each member's business.

GDST was established in 2017 as a seafood industry forum dedicated to drafting the first-ever global standards for seafood traceability. The GDST 1.0 standards were launched in March 2020 after three years of consensusbased work.

With the estimation that illegal fishing accounts for as much as a quarter of all fish caught globally, which in turn fuels overfishing, environmental degradation and human rights abuses, it is essential that seafood supply chains demonstrate where products come from and how they were sourced.

Meanwhile, the aquafeed companies in SeaBOS are also cooperating with MarinTrust, the B2B certification programme for the production of marine ingredients, to see how the new traceability standard can be incorporated into those businesses, as well as the broader marine ingredients industry.

At the Our Ocean conference in 2019, SeaBOS announced it has joined the Global Ghost Gear Initiative (GGGI), the world's first global platform for tackling abandoned, lost and discarded fishing gear (ALDFG), also known as ghost gear.

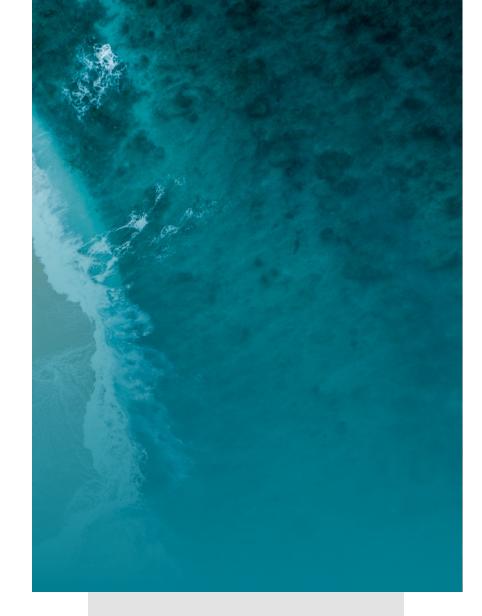
As a feed company, Skretting does not conduct any fishing operations. Nevertheless, we are committed to sharing all necessary traceability information with the value chain.

Our CEO, Therese Log Bergjord, will take on the role of Vice Chair of SeaBOS in 2020.









# The origin of our ingredients

Like humans, fish and shrimp have specific nutritional needs. These needs vary across species and life stages. Aquaculture feed can contain many different ingredients of vegetable, marine and land animal origin. These ingredients contribute nutrients like protein, amino acids, energy, fatty acids, vitamins and minerals to the finished feed, ensuring the fish and shrimp receive a complete nutritional package. We source our primary feed ingredients from agricultural crops, fisheries and by-products from human food processing.

Our current global feed ingredient usage is comprised of a significant amount of by-products. These are ingredients from the human food processing chain that would otherwise be wasted if not used in the feed industry. Examples can include by-products from processing of fish and land animals, and other materials like brewer's yeast.

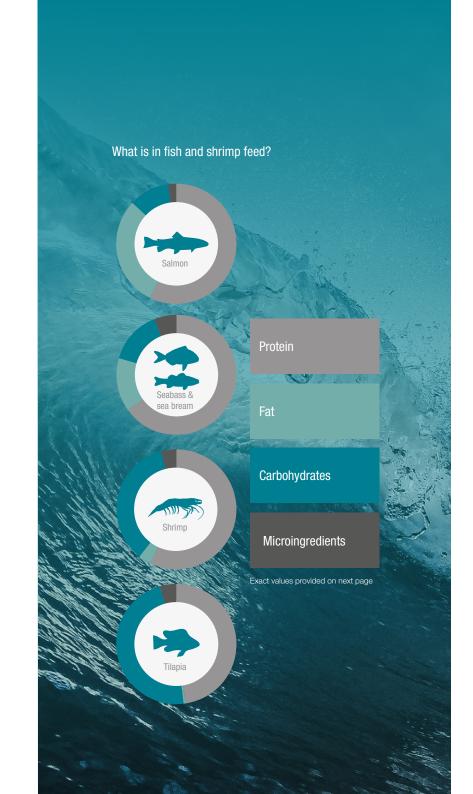
Aquaculture is part of the emerging bioeconomy - comprised of those parts of the economy that use renewable biological resources from land and sea, such as crops, forests, fish, animals and micro-organisms to produce food.

Skretting is involved in many different projects related to the use of by-products, including a research project called SYLFEED, an international and multidisciplinary 4-year project aiming to scale technology to convert wood residues into a protein-rich feed ingredient.

We are actively searching for ingredients that will result in more innovative, low emission aquaculture feeds. A reduction in emissions can come through reducing land use, reducing carbon footprint and increased use of products that are not traditionally used directly for food.

Agricultural crops represent the majority of feed ingredients for salmon, shrimp and tilapia. Marine ingredients are also important in salmon and shrimp diets.

Many years of research at Skretting ARC have meant that we can be increasingly flexible in the way that we use ingredients. We consider ingredients as carriers of nutritional components, and with advanced nutritional understanding we are less limited by the source ingredients.



### 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 & sea bream	Shrimp <sup>2</sup>	Tilapia	Average Sk
	material			average % inclusion in feed				Ave
	Wild capture and farmed fish and crustaceans	marine proteins	fishmeal crustacean meal	10.2	20.0	14.8	1.5	12.1
	By-products from farmed land animals	land animal proteins <sup>1</sup>	poultry meal	13.6	15.2	5.7	6.3	16.1
Protein	Agricultural crops	vegetable proteins	wheat gluten corn gluten soybean meal soy protein concentrate rapeseed meal sunflower meal lupin faba	33.6	30.0	36.8	39.8	31.7
	Wild capture and farmed fish and crustaceans	fish oil	fish oil	10.8	8.2	1.3	0.3	6.1
Fat	Agricultural crops	vegetable oils	rapeseed oil soybean oil camelina oil	17.4	4.1	2.1	0.2	9.4
	By-products from farmed land animals	land animal oils <sup>1</sup>	poultry oil	1.5	1.9	0.1	0.0	1.6
Carbo- hydrates	Agricultural crops	starch raw materials	wheat	10.7	14.4	35.1	47.5	17.5
Micro- nutrients	Micronutrients	vitamins minerals pigments	vitamin premixes mineral premixes pigments	2.2	6.2	4.1	4.4	5.5

<sup>1</sup> Use of land animal by-products will depend upon market acceptance and legislation 2 Level of starch raw materials will be different in extruded and pelleted feed

### Responsible sourcing

The ingredients in our aquaculture feeds are often processed into different forms from the raw material. For example, wheat can be processed into wheat flour and wheat gluten, soy beans into soybean meal, soy protein concentrate and soybean oil. Fish or by-products from fish can be processed into fishmeal and fish oil.

This means that the primary source of the feed ingredient is shipped to a factory and processed into the feed ingredient by the manufacturer. There are a number of sustainability issues that are common for manufacturers in general. For instance, the manufacturing process must not lead to environmental pollution like harmful emissions to air, or effluents to water. Sustainability also encompasses social issues, including ensuring that the factory is a safe working place. In addition, manufacturers must respect basic human and labour rights.

Skretting operates systematic evaluation of the sustainability risks linked to primary sources of feed ingredients and manufacturers of feed ingredients.

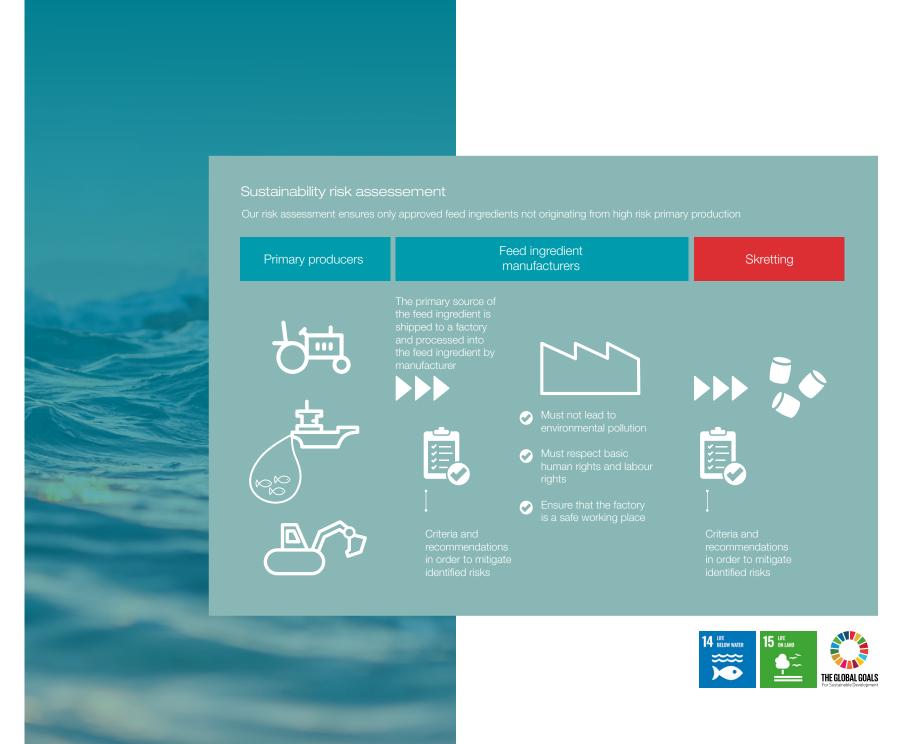
Based on the outcome of these risk assessments the combination of primary source and manufacturer of feed ingredients must be evaluated and approved before a Skretting company can buy the feed ingredient.

Responsible production and consumption require that we look beyond the traditional aspects of cost and quality when making purchasing decisions. At Skretting and Nutreco, we have identified the relevant sustainability issues in our Supplier Code of Conduct.

Our Supplier Code of Conduct enables us to engage with our suppliers on material issues relating to their operations and to set minimum criteria relating to environmental, social and legal aspects. Based on spend, in 2019 over 90% of our suppliers had signed off on their agreement to comply with the Code. It is mandatory for all new suppliers to sign.

Supplier sustainability audits are performed, with an extra focus on countries and ingredients that have been identified as 'high risk'. Currently, Skretting has 1300 suppliers for ingredients located around the world.





## The origin of marine ingredients

Aquaculture feeds often contain fishmeal and fish oil that have been processed from wildcaught fish. These fisheries are sometimes referred to as 'reduction fisheries', where all catch is delivered to a factory for processing.

The small pelagic fish species caught for this purpose are commonly known as 'forage fish', and are often small, short-lived species like sardine, anchovy and herring that occupy a low trophic level (LTL) in the marine ecosystem. Due to their specific

that all fishmeal

and fish oil from

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of fishery and

species of fish

population biology and dynamics, these species It is our ambition are frequently resilient to fishing pressure if catch is well managed, but overfishing is always a possibility without effective controls.

In some regions these species are important for direct human consumption. Through

our sustainability programme, we strive to ensure that marine feed ingredients come from sustainable sources in the short- and long-term. We actively work to align industry incentives to support processes that will lead to improved fisheries management.

In addition to the use of wild-caught fish, the processing of fish for human consumption gives rise to by-product 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 is often produced, and it is estimated that roughly a third of fishmeal produced is made from seafood by-product from fish for human consumption.

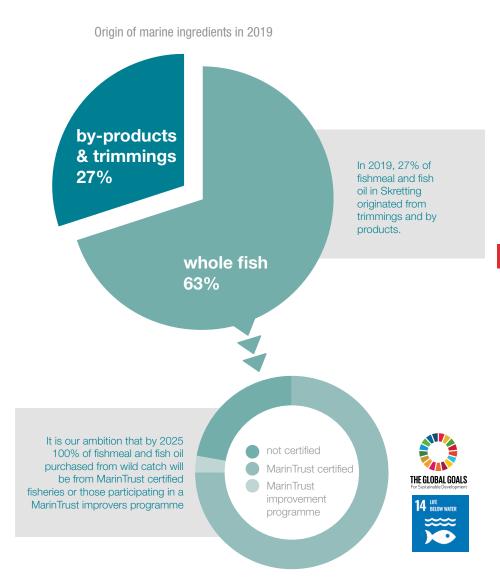
The use of by-products is increasing as more whole fish are used for direct human consumption, and society becomes more successful at collecting the material and fuelling the bioeconomy.

While a large amount of by-products used to produce fishmeal and fish oil comes from

> wild capture fish processing for human consumption, an increasing amount comes from the by-products of aquaculture processing. Trimmings are collected from seafood processing plants, from processing at retailers, processing plants in aquaculture, processing on board fishing vessels and more.

In 2019, 27% of fishmeal and fish oil in Skretting originated from trimmings and byproducts. The majority of these by-products came from wild fisheries, but we see an increase in by-products from processing of farmed species like salmon, tilapia and shrimp.

It is our ambition that all fishmeal and fish oil from trimmings must be able to be traced back to the origin of fishery and species of fish. These species must not be listed as endangered on the IUCN redlist.



This table shows the main fisheries from which we purchase some of our fishmeal and fish oil. The exact proportion of fishmeal and fish oil purchased from these fisheries will vary by country, and can vary over time.

The information provided below is adopted from the report by the Sustainable Fisheries Partnership "Reduction Fisheries: SFP Fisheries Sustainability. Overview 2019"

	F	Certifications				MDA a Conford watch (voca		
Stock species <sup>1</sup>	FIP name	FIP start year	FIP progress rating	MarinTrust	MSC <sup>4</sup>	Date of first MSC certification	# of MSC fisheries <sup>5</sup>	MBAq Seafood watch (year assessment) <sup>7</sup>
Antarctic krill - Atlantic Southern Ocean	-	-	-	-	Cert, Sus <sup>8</sup>	June 2010	3	Good alternative (2017
Blue whiting - NE Atlantic	-	-	-	Yes	Cert	Jun-16	4	-
Gulf menhaden - Gulf of Mexico	-	-	-	Yes	FA	-	1	Good alternative (2015)
European sprat - Baltic Sea	-	-	-	Yes	Cert, FA,Wdrn	May 2017	3	-
European sprat - North Sea, Skagerrak and Kattegat	-	-	-	Yes	Cert, Wrdn	March 2017	3	-
Sandeels nei - Central Eastern North Sea	-	-	-	Yes	Cert	March 2017	2	-
Norway pout - North Sea	-	-	-	Yes	Cert	March 2017	2	-
European pilchard - NW Africa central	Morocco sardine - pelagic trawl and seine	2014	А	Yes <sup>2</sup>	-	-	-	-
Araucanian herring - Central-South Chile	-	-	-	Yes	-	-	-	-
Chilean jack mackerel - SE Pacific	-	-	-	Yes	Cert, FA	April 2019	2	-
Atlantic menhaden - NW Atlantic	-	-	-	Yes	Cert	September 2019	1	Good alternative (2015)
Anchoveta - Peruvian Northern-Central	Peruvian anchovy - industrial purse-seine	2017	А	Yes	-	-	-	-
Anchoveta - Peruvian Northern-Central	Peruvian anchovy - small scale purse-seine	2017	А	_6	-	-	-	-
Anchoveta - Southern Peru / Northern Chile (regions XV-I-II)	-	-	-	Yes	-	-	-	-
Anchoveta - Chilean Central Southern (regions V-X)	-	-	-	Yes	-	-	-	-



Notes: (1) This list covers fisheries from the reduction fisheries sector that are associated to one or more active fishery improvement projects (FIPs), or the certifications and rating programs considered. (2) Certified by MarinTrust as "by-product" fishery (for more information visit the MarinTrust website). (3) For more information on the currently active FIPs, please visit the Improvement Projects section in FishSource or the respective FIP public reports in Fishery Progress (FishChoice 2019). (4) MSC Status: Cert = Certified; FA = Full Assessment; Sus = Suspended; Wdrn = Wdrawn. (5) Refers to the number of fisheries that are in the MSC program and that overlap with the stock (source: SFP 2019; MSC 2019). (6) In Peru, the artisanal fishery for network must be used for human direct consumption only, thus it is suffered by Aquarium Seafood Watch categories (MBAq 2019): Best Choice; Good Att. = Good alternative; Av = Avoid. Vear assessment refers to the year the latest Seafood Watch assessment was conducted for the respective fishery. (8) The Rimfost Antarctic krill MSC fishery has been suspended since June 2017. (9) There are improvement activities underway in this fishery, but it is still not evaluated as to meeting the requirements of a formal FIP. (9) The existing FIP was also recently accepted into the MarinTrust improvement program.

Stock species <sup>1</sup>	F	Certifications				- MBAq Seafood watch (year		
	FIP name	FIP start year	FIP progress rating	MarinTrust	MSC <sup>4</sup>	Date of first MSC certification	# of MSC fisheries <sup>5</sup>	assessment) <sup>7</sup>
Capelin - Barents Sea	-	-	-	Yes	-	-	-	-
European pilchard - NW Africa southern (Morocco)	Morocco sardine - pelagic trawl and seine	2014	А	Yes <sup>2</sup>	-	-	-	-
Sandeels nei - Dogger Bank	-	-	-	Yes	Cert	March 2017	2	-
Capelin - Icelandic	-	-	-	Yes	Cert	April 2017	1	F
Indian oil sardine - Goa	Indian oil sardine	2018	С	-	-	-	-	F
Pacific chub mackerel - Ecuador	Ecuador small pelagics	-	-	Yes <sup>2,9</sup>	-	-	-	-
Frigate tuna - Ecuador	Ecuador small pelagics	-	-	_9	-	-	-	F
Indian oil sardine - Maharashtra	Indian oil sardine	2018	not rated	-	-	-	-	-
Boarfish - NE Atlantic	-	-	-	Yes	-	-	-	F
Pacific anchoveta - Pacific Panama	Panama small pelagics	2011	А	-	-	-	-	-
South American pilchard - Gulf of California	-	-	-	Yes	Cert	July 2011	1	e e
Pacific thread herring - Panama	Panama small pelagics	2011	А	_9	-	-	-	-
Pacific thread herring - Gulf of California	-	-	-	Yes	Cert, Wdrn	July 2011	3	e e
Slender thread herring - Mexico	-	-	-	Yes	Cert	October 2016	1	-
Slender thread herring - Gulf of California	-	-	-	Yes	Cert	October 2016	1	
Middling thread herring - Mexico Pacific	-	-	-	Yes	Cert	October 2016	1	-
Sandeels nei - Central and Southern North Sea	-	-	-	Yes	Cert	March 2017	1	-
South American pilchard - Pacific Baja California	-	-	-	Yes	-	-	-	-
Madeiran sardinella - NW Africa	Mauritania small pelagics - purse seine	2017	С	_9	-	-	-	-
Bonga shad - NW Africa	Mauritania small pelagics - purse seine	2017	С	_9	-	-	-	-
Round sardinella - NW Africa	Mauritania small pelagics - purse seine	2017	С	_9	-	-	-	-
European anchovy - South Africa / SE Atlantic	-	-	-	Yes	-	-	-	-
Falkland sprat - Chilea (region X)	-	-	-	Yes	-	-	-	-
Anchoveta - Chilean Central-Southern (regions III and IV)	-	-	-	Yes	-	-	-	-
South Africa redeye herring - South Africa /SE Atlantic	-	-	-	Yes	-	-	-	-

Notes: (1) This list covers fisheries from the reduction fisheries sector that are associated to one or more active fishery improvement projects (FIPs), or the certifications and rating programs considered. (2) Certified by MarinTrust as "by-product" fishery (for more information visit the MarinTrust website). (3) For more information on the currently active FIPs, please visit the Improvement Projects section in FishSource or the respective FIP public reports in Fishery Progress (FishChoice 2019). (4) MSC Status: Cert = Certified; FA = Full Assessment; Sus = Suspended; Wdrn = Withdrawn. (5) Refers to the number of fisheries that are in the MSC program at that overlap with the stock (source: SFP 2019; MSC 2019). (6) In Peru, the artisanal fishery for anchoveta must be used for human direct consumption only, thus it is expected in the current overview. (7) Monterey Bay Aquarium Seafood Watch categories (MBAq 2019): Best Ch. = Best Choice; Good Att. = Good alternative; Av = Avoid. Year assessment refers to the year the latest Seafood Watch assessment or sonducted for the respective fishery. (8) The Rimfort Antarctic krill MSC fishery has been suspended since June 2017. (9) There are improvement activities underway in this fishery, but it is still not evaluated as to meeting the requirements of a formal FIP. (9) The existing FIP was also recently accepted into the MarinTrust improvement program.

#### How much wild fish does a salmon feed need?

Fishmeal and fish oil from forage fish are both finite resources that are shared across a range of users with increasing demands, from direct human consumption to aquaculture to pig and poultry production. We promote the efficient use of these

resources, producing increasing amounts of farmed salmon from a given input of fishmeal and fish oil.

We regularly update the industry with the amount of wild fish used to produce 1 kg of feed, based on the average, weighted raw material composition. The

use of wild fish is commonly expressed as the forage fish dependency ratio (FFDR). It is calculated based on the use of fishmeal and fish oil.

With the knowledge that we have at Skretting, salmon grower feeds essentially require zero marine ingredients. This is possible due to nearly 30 years of R&D at Skretting ARC.

Using technology that is based upon our latest understanding of essential micronutrients and how they interact with fish and shrimp, Skretting's MicroBalance® concept allows us to replace one feed raw material with another without impacting

performance, welfare or end-product quality.

This means we can think about ingredients as carriers of nutrition, without focusing on the ingredient itself. Currently, however, the prices of the novel alternatives that are reaching the market

make marine-free feeds less viable from an economic perspective.

However, new feed ingredients are entering the market rapidly, and we anticipate that within the coming years, these alternatives will offer a competitive solution for our aquaculture feeds.

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THE GLOBAL GOALS





zero marine

ingredients.

## The origin of soy ingredients

Tropical deforestation is widely regarded as one of the most serious global environmental problems of our time. As such, we are committed to supporting raw material production initiatives that do not occur in regions subject to deforestation. We have built long-term sustainable purchasing and supplier policies that prohibit the sourcing of soy products from lands that are illegally deforested. In addition, part of our purchasing policy is to encourage our suppliers to pursue certification according to recognised schemes for responsible production, especially when it comes to soy.

A cornerstone in our purchasing policy is assuring that all feed ingredients are produced in a safe and responsible way. In order to do so it is essential that also for vegetable raw materials we are able to trace these raw materials back to the country of origin – where they were cultivated. It is important to know the country of origin for raw materials in order to evaluate risks associated with illegal deforestation and lack of respect for labour rights and human rights.

In 2019 we identified that 55% of the soy Skretting purchased was identified coming from South America. The rest originated from countries and regions like the USA, Canada, Europe, Africa and India. As of today we do not have a regular and mandatory system to trace soy products back to the country or region of soybean cultivation. In 2019 we worked with ProTerra and our soy protein concentrate producers in Brazil to improve traceability of where soy has been cultivated. From 2020 we will be able to trace the soy that is the origin of soybean concentrate in Brazil back to the community where it was cultivated.

In 2019, 33% of our soy purchases met criteria of being deforestation-free. Compliance was assured through buying soy that where either ProTerra or RTRS certified. We see a reduction of the deforestation-free soy purchases compared to 2018. This is due to our salmon feed producing operations buying a majority of deforestation-free compliant soya. In 2019, Skretting closed its business in the UK, where only deforestation-free soy was purchased. In 2020 we will work to improve our risk evaluation of deforestation when buying from different geographical areas.

Origin of soy ingredients in 2019

Soy originating from deforestation-free land - 33%

Soy originating from land where legal deforestation permitted - 67%













## A novel approach to increased, sustainable production

With the global demand for safe and nutritious seafood products growing at an unprecedented rate, and output from most capture fisheries plateauing in recent years, aquaculture has been successfully supplying incrementally larger volumes.

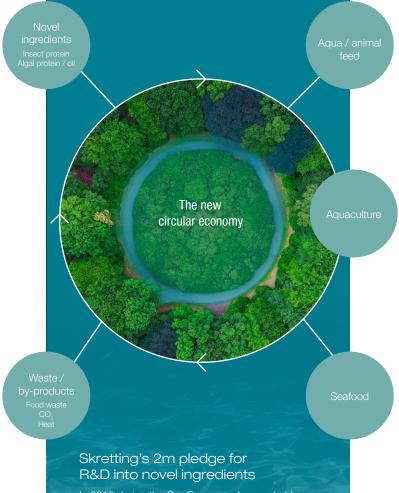
There has been increasing focus over many years on overcoming traditional reliance on formulating feeds from conventional but finite marine ingredients, particularly fishmeal and fish oil.

While the fishmeal and fish oil inclusion rates in aquafeeds have followed a steady downward trend as the feeding efficiency of aquaculture systems have advanced, selective use alone is not enough to ensure that the required long-term growth rates can be sustained by the sector. A further solution that has emerged in recent years is the application of new raw materials and specialty ingredients, commonly known as "novel ingredients". These technologies can be used both through replacement and interchange with conventional ingredients.

Worldwide, there has been increased activity focused on the R&D of novel ingredients with the aim to ascertain new protein raw materials and alternative sources of essential omega-3 long chain fatty acids for use in aquaculture feeds. The technologies currently at the forefront of this movement include algae, microbial and insect-based protein and oil sources.

Skretting has long been very supportive of the development of novel ingredients and helping leading innovators achieve scalability. Indeed, some of our first diets comprising EPA and DHA-rich algal oils and insect proteins are already being commercially used. As soon as these were available and verified through extensive R&D, Skretting launched salmon diets that contained no fishmeal or fish oil.

To support the next wave of advancements in the novel ingredient space, we are continuing to invest considerable resources into exploring the commercial application of other alternative ingredients. This work includes fully understanding their viability from nutritional, sustainability, quality and safety, regulatory and financial perspectives.



In 2019 during the Our Ocean conference held in Oslo, Skretting cemented its commitment to investigating novel ingredients by pledging a commitment of \$US2m to the continued R&D. Read the full story here.









# Innovation and sustainability

As you have read, ingredient flexibility is an increasingly essential part of aquaculture sustainability. At Skretting, we firmly believe that additional alternatives are to be found in the novel ingredients sector.

With their meticulous attention to detail, the nutrition experts within Skretting ARC are appraising many such products. They are seeking to understand their full nutritive profile and also establish to what degree they can be incorporated in aquaculture diets. As with all of the new ingredients that we test, these evaluations focus on the four main attributes of sustainability, food safety, nutritional value, and functionality.

Currently, very few novel ingredients are commercially available to the feed industry, but there are many young companies working hard to try and achieve the scale necessary to make their application in aquaculture feeds successful. Part of their challenge is to make these solutions available at prices that are viable for the value chain. Nevertheless, this is a very new area for aquaculture and we are giving it significant encouragement. From an innovation perspective, we are really pushing hard to make these alternatives available in order to give fish and shrimp farmers the opportunity to use them.

We have also learned that it is important to work with these start-up and scale-up companies from the early development stages. Through these close collaborations, we believe we can help them to adapt and optimise their processes and make sure that they are producing the levels of quality and consistency that we require in our aquafeeds. Therefore, once the volumes do indeed become available, and there is sufficient willingness from the value chain, we will be in a position to use them immediately.

Our R&D has taken us to the forefront of the development and implementation of novel ingredients in the aquafeed space. We are already providing commercial feeds that are independent of fishmeal and have recently validated diets that are free of both fishmeal and fish oil. For the first time, salmon has been grown in commercial conditions from sea transfer to harvest with diets that did not contain marine ingredients (no fishmeal and no fish oil). And although this could be our ultimate goal, our investment in this area is not slowing. Quite the contrary. Inspired by our recent breakthroughs in the salmon sector, we are firmly committed to providing a platform for aquaculture - encompassing as many species and production regions as possible – to grow sustainably and thereby increase the industry's contribution to global food security.





Dr Alex Obach, Skretting R&D Director

## Nutritional solutions launched in 2019

One of our main objectives is to develop and provide unique combinations of products, services and models that help fish and shrimp farmers globally to increase their productivity, support the health of their animals and farms, and to also minimise the environmental impacts of their operations.

In the past, a lot of our R&D efforts were focused on salmon. Through this work, we built up an extensive knowledge and detailed understanding about the nutritional needs of the species. Along the way, we have also studied the nutritional value of a wide range of raw materials and established what benefits they can offer when incorporated into aquaculture feeds.

While we serve a much wider aquaculture feed market today, a lot of the nutritional knowledge and R&D platforms that we continue to develop for salmon can also be utilised to formulate new and improved feed solutions for many other species of fish and shrimp.

In 2019, Skretting customers were able to access a number of new products, including the following solutions.

Based on extensive knowledge of tilapia nutrition, Optiline provides maximum value for tilapia farmers worldwide by allowing fast growth and low feed conversion ratio when fed at optimal feeding frequency.



Protec for tilapia is the first health diet specifically aimed at proactively supporting the production of tilapia species. This functional diet has been designed to help support the fish and enhance their ability to cope with challenging situations, including the hot summer seasons. The health parameters and survival rates of fish are consistently sustained using this solution.











MaGro is a soft-extruded pellet feed, developed specifically for Japan's bluefin tuna farmers. With its introduction to the market, farmers no longer need to follow baitfish feeding protocols with their fish, thereby reducing the inherent biosecurity risks. Moreover, the new diet offers superior performance, easier handling logistics and improved food safety.





The overriding aim of Xpand is to provide shrimp farms with far greater levels of flexibility. In using this grower diet, and without taking any shortcuts or unnecessary risks, farmers can reduce the associated costs and impacts of farming in exposed water locations by harvesting earlier at the same size; or alternatively, they can choose produce larger sized shrimp within their usual production schedules. The physical formulation of Xpand also supports improved water quality in the grow-out phase by ensuring that more of the feed is consumed by the shrimp.











Looking ahead, Skretting is also in the process of developing a new feed concept, collectively known as RCX. These products will have a high structural integrity and be optimised for the requirements of recirculation aquaculture systems (RAS). Designed to increase stability and reduce risk in these systems, RCX will build on our existing RAS range, including market-leading RC. Furthermore, to ensure solution consistency, all RCX-producing factories will be audited. It is our intention to rollout RCX globally, starting with North America.

New SHIELD contains specifically-selected functional ingredients that work in synergy to contribute to the ability of seabream to cope with the onset of several different health challenges. It helps maintain the structural integrity of the intestines and the gills.

## AquaSim - advancing precision farming

Utilising the comprehensive portfolio of aquaculture species' growth and feeding models that we have built up over three decades, AquaSim is our unique suite of management tools that provides qualified references through which fish and shrimp producers can calculate their expected farm performance. Crucially, AquaSim also provides tailored recommendations, including the most cost-effective stocking patterns, feed selection and feeding strategies to achieve desired outcomes.

Recognising that through Industry 4.0 – with data, connectivity and smart equipment bringing the digital and physical worlds increasingly closer together – there is a significant opportunity for aquaculture to meet future food requirements, we moved AquaSim to the cloud with Microsoft Azure in October 2019.

The result is an integrated digital platform that combines biology, quality and economics alongside sensors, feeders, internet of things (IOT) and other connected technologies into a sophisticated toolkit. It uses rich data to calculate expected performance and also provides real-time production upgrades on an individual farmby-farm basis.

Aligned with this offering, remotely operated underwater vehicles (ROVs) are enabling the instantaneous monitoring of different environmental parameters, such as temperature and oxygen levels of water at different depths, in order to detect anomalies in advance and consequently develop an early response that will prevent losses in the water.

At Skretting, we are committed to remaining at the forefront of the digitalisation and technological advancement of the aquaculture industry globally. By investing in new tools – those that already exist and those still in development – we believe we can help optimise fish and shrimp farm production and also improve the sustainability performance of our customers.











## Advancing Egyptian aquaculture through Sakkara

Nile tilapia is the cornerstone of fish farming in Egypt. Today, the North African country harvests around 900,000 tonnes of the species, with production mainly taking place in ponds. Almost all of these fish are consumed locally.

Egypt's tilapia sector has become increasingly competitive over the past decade – in line with the market's rising demand. This growth has come despite a strict regulatory framework that insists that the farming of fish cannot occur in locations where the land could instead be used for agriculture. Essentially, this means that fish producers are only permitted to use brackish and marine water and infertile land. Additionally, the use of fresh water is prohibited. Instead, they must use water from lakes and drains.

Having water from the Nile first going to agriculture sectors before it can be used for aquaculture creates a number of challenges for tilapia farmers, including suboptimal water parameters. The sector also suffers from disease-related threats such as summer mortality syndrome which came to the fore in 2013. Against such a backdrop, we believe in supporting farmers to incorporate best-practice into their farming systems, particularly with regards to optimising fish health and farm efficiency.

To support these endeavours, through our local company Skretting Egypt (established in 2008), we have been applying our worldclass expertise to the market for more than a decade. 2019 was an important year in this regard. First, Skretting Egypt launched Nutra into the local market. These high-performance starter diets support first-feeding fry by providing the specific nutrients and right particle size for each life stage - from egg to fingerling. Also new to the market was Protec, a diet especially designed to help support tilapia and enhance their ability to cope with during challenging situations, including the hot summer seasons. Both solutions have been warmly welcomed by Skretting Egypt's customers.

Taking its name from ancient Egypt and the first (stepped) pyramids, Sakkara is our most recent project aimed at helping local farmers grow their production step-by-step.

Built on the three pillars of farm management, water management and feed management, Sakkara's main objective is to improve the productivity and profitability of tilapia farms. Last year, following the identification of five key pilot farms across the country's main aquaculture region, we began implementing training, knowledge sharing, technology and the latest Skretting solutions.

Because most tilapia ponds are interconnected with water running from one to the next, a key part of the Sakkara programme has seen these producers introduce a single inlet and a single outlet to their farms. They were also required to introduce an initial settlement pond, which is where water first arrives at the farm. Here the water can be stored, treated and monitored before it goes on to the actual grow-out ponds.

While still very much in its infancy, in the long-term, Sakkara is expected to provide the platform for these farmers to increase their stocking density, improve FCR, and reduce mortality rates.











## **About Skretting**

Skretting is the global leader in providing innovative and sustainable nutritional solutions for the aquaculture industry.

Skretting has production facilities in 18 countries, and its 3,501 employees manufactures and delivers high quality feeds from hatching to harvest for more than 60 species. The head office is located in Stavanger, Norway.

Skretting is the aquaculture division of Nutreco, which is headquartered in Amersfooort, the Netherlands. Nutreco is owned by SHV Holdings, a privately owned Dutch trading company, regarded as one of the world's largest private trading groups. SHV is a highly diversified company, with interests in transport, retail, oil, food and financial services. It currently employs around 60,000 people and operates in 58 countries.

#### The vision that inspires us

Together with our customers, suppliers and partners, we lead innovation to ensure access to more sustainable, healthier and safer seafood for the world's growing population.

#### The values we live by

Skretting follows a global culture that is open, in which all our people care deeply about what they do, about each other and the environment in which they work. To fulfil our mission of 'Feeding the Future', we adhere to four clearly defined core values – Innovative, Caring, Collaborative and Capable – which are adopted throughout Nutreco. Our values are underpinned by SHV's most important values of integrity and loyalty.





# feeding the future

Our mission of 'Feeding the Future' is based on the challenge of feeding a global population that's forecast to reach 9.5 billion people by 2050. The fast-growing world population, increased urbanisation, a growing middle class and changing diets will lead to a surge in demand for protein, especially in emerging markets. Our ambition is to contribute to meeting the rising food needs in a sustainable manner. We will do this by constantly seeking innovative ways to raise the efficiency and nutritional value of our products, the productivity of our activities and those of our customers, and to reduce the environmental impact of our value chains. Sustainability is not just what we aspire to do, it's what we do.

PRODUCTION FACILITIES

FULL TIME EMPLOYEES

18
COUNTRIES

3,501

SPECIES

AQUACULTURE FEEDS 2019

60

2.3
MILLION TONNES

In 2019 Skretting produced 2.3 million tonnes of aquaculture feed. Sales were the highest in Europe and Americas. The turnover for the Skretting Division in 2019 was 2.6 billion euros.

Skretting has 3501 full time employees. Eighty three percent of the full time employees are men and 17% are women.

The number of employees is down by 29 from 2018, partly due to the closure of the business in the United Kingdom. Skretting employs people from 61 nations and the average age is 39.

Distribution of turnover (volume) in the different geographical areas

Region	%
Europe	36
Americas	41
Asia	12
Africa	6
Oceania	4
Total	100

Number of employees and gender in the different geographical regions

Region	Female	Male	Female %	Male %	Sum full time employees
Africa	47	405	10	90	452
Americas	155	1,125	12	88	1,280
Asia	159	722	18	82	881
Europe	233	579	29	71	811
Oceania	13	64	17	83	77
Total	607	2,894	17	83	3,501



SKRETTING HQ Head office: Skretting Group Head office: Skretting Aquaculture Research Centre (ARC)

SKRETTING NORWAY Plants: Stokmarknes, Averøy and Stavanger Feed for: Atlantic salmon, seawater trout, cod.

halibut, catfish and wrasse

SKRETTING FRANCE

SKRETTING ITALY

Plants: Vervins and St Hervé Feed for: Freshwater trout, sea bass, sea

bream, turbot, salmon, catfish, tilapia, sturgeon, eel, carp and shrimp

Plant: Mozzecane Feed for: Freshwater trout, sea bass, sea bream, sturgeon, eel, catfish and carp

SKRETTING CHILE Plants: Osorno and Pargua Feed for: Atlantic salmon, pacific salmon, freshwater and ocean trout, tilapia, shrimp and yellowtail amberjack

SKRETTING SPAIN

Plant: Cojóbar

Feed for: Freshwater trout, sea bass, sea bream, turbot, sole, meagre, eel, carp, catfish, amberjack and sturgeon

SKRETTING CANADA

Plants: Vancouver and St Andrews

Feed for: Atlantic salmon, arctic char, pacific salmon, sable fish, sturgeon, trout, halibut and tilapia

SKRETTING JAPAN

Feed for: Yellowtail kingfish, red sea bream, bluefin tuna, amberjack, striped jack, sea bass, freshwater and seawater trout

SKRETTING AUSTRALIA

Plant: Hobart

Feed for: Atlantic salmon, chinook salmon, barramundi, yellowtail kingfish, abalone, prawn, freshwater and seawater trout

SKRETTING EGYPT Plant: Belbies Feed for: Tilapia, catfish, mullet, carp and sea bass SKRETTING USA Plant: Salt Lake City

> Feed for: Barramundi, char, catfish, hybrid striped bass, koi, largemouth bass, pacific

salmon, sturgeon, steelhead, tilapia and trout

SKRETTING TURKEY

Plant: Güllük

Feed for: Freshwater trout, carp, sea bass and sea bream

SKRETTING VIETNAM

Plants: Ho Chi Minh City and Long An Province

Feed for: Black tiger shrimp, whiteleg shrimp, giant freshwater prawn, red tilapia, snakehead, climbing perch, pangasius, sturgeon, Asian sea bass, grouper, cobia, clown featherback, snakeskin gourami and pompano

SKRETTING CHINA

Plant: Zhuhai

Feed for: Whiteleg shrimp, black tiger shrimp, trout, sea bass, snakehead, golden pompano, catfish and sturgeon

SKRETTING NIGERIA

Plant: Ibadan

Feed for: African catfish and tilapia

SKRETTING ECUADOR

Plants: Guyaquil x 3

Feed for: Shrimp, tilapia and trout

SKRETTING ZAMBIA

Plant: Siavonga

Feed for: Tilapia

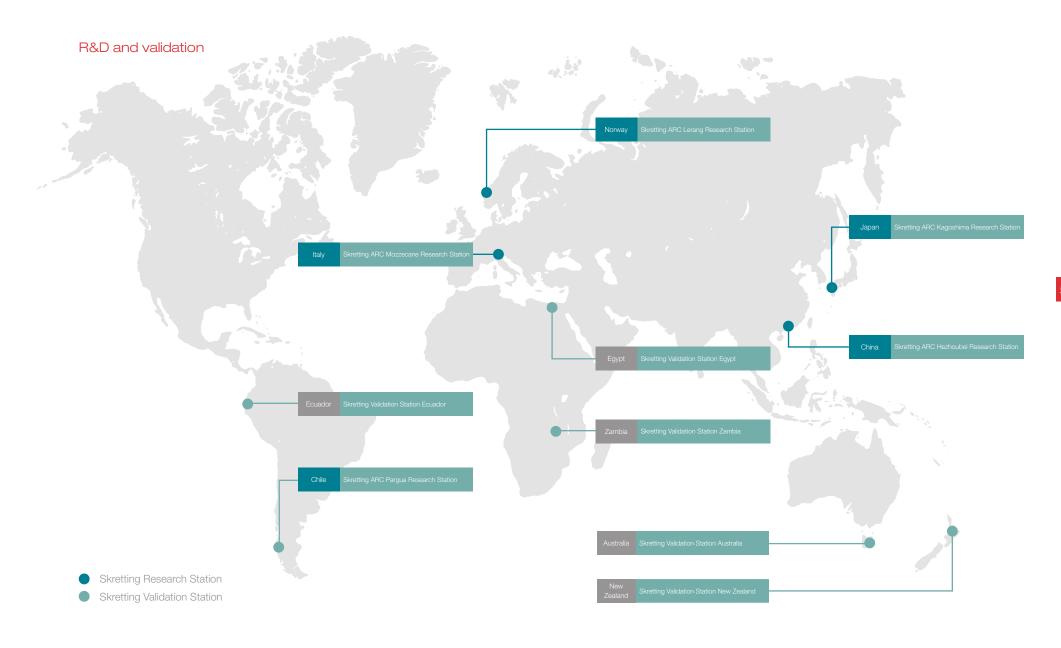
SKRETTING HONDURAS

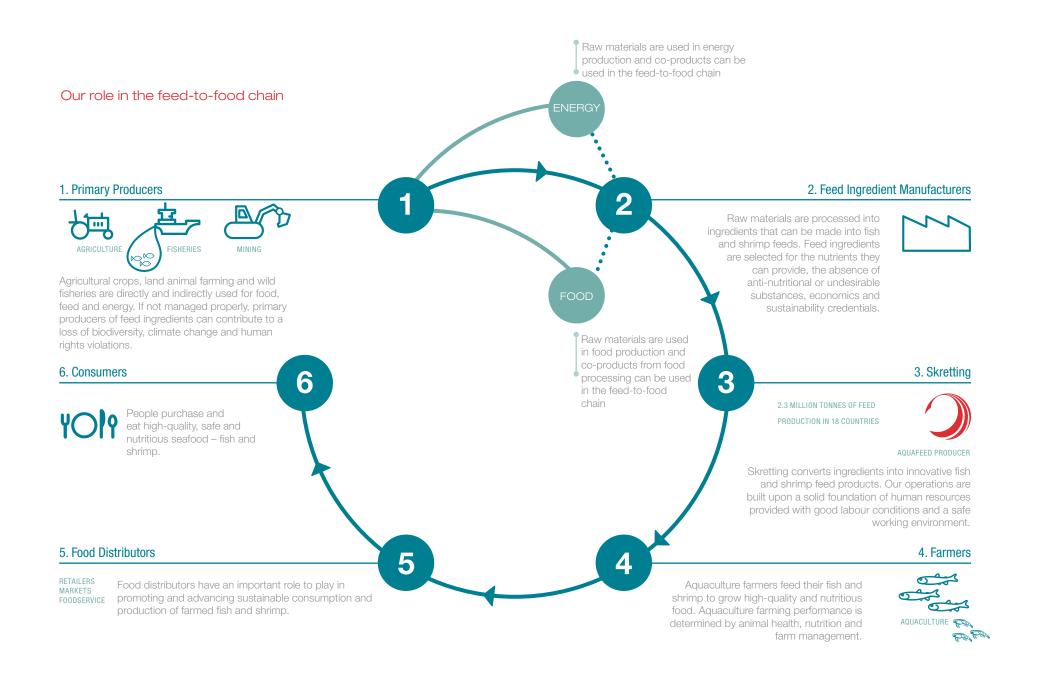
Plant: San Francisco de Yojoa Feed for: Shrimp and tilapia

SKRETTING INDIA

Plant: under construction

Feed for: Whiteleg shrimp, sea bass, tilapia





#### Certifications

In 2019, our OpCos also continued to work closely with third-party independent bodies, customers and local authorities to ensure compliance with standards, regulations and certifications to guarantee the consistent formulation and production of high-quality animal nutrition and fish and shrimp feeds.

Skretting OpCos are certified to a number of ISO standards which help us ensure that we have consistent quality systems and continous improvement. We are also certified according to private standards that are important for our customers to gain market access. Below is an overview of certifications and compliance held by our OpCos.

Nutrace® is Skretting's company-wide management programme that ensures feed-to-food quality and safety.

All internal operations are audited and all suppliers undergo a comprehensive evaluation and approval process to ensure premium-quality, renewable and responsibly managed resources. We conduct robust analyses of all approved raw materials - at delivery, throughout the formulation process, and up to the point of feed delivery.

	ISO 9001	ISO 14001	ISO 22000	НАССР	GlobalGAP	BAP	ASC (compliant)	Organic	0HSAS 180001	Other
Skretting ARC										ISO 17025
Skretting Australia										FeedSafe
Skretting Canada					70%					Feed Assure (70%)
Skretting Chile										
Skretting China										
Skretting Ecuador										Naturland Organic, EU organic
Skretting Egypt										
Skretting France										Label Rouge, VLOG, Naturland Organic
Skretting Honduras										
Skretting Italy										Naturland Organic, ISO 45001
Skretting Japan										
Skretting Nigeria										
Skretting Norway										Label Rouge, VLOG, Debio Organic
Skretting Spain										Halal (specific diets)
Skretting Turkey										Halal
Skretting USA										
Skretting Vietnam										
Skretting Zambia										

## Key stakeholders

Stakeholder engagement is the key starting point for a company, not only in terms of its sustainability reporting cycle, but also as a means to connect to its business strategy and demonstrate how a company is responsive to the legitimate needs and concerns of its key stakeholders. Stakeholder engagement is a key component that drives sustainability within Skretting.



Dimension	Stakeholder	Description & rationale
Individual	Consumers	Consumers often have important input about the sustainability of food production systems and they represent an important force in changing behavior in the food chain. They will also heavily influence the attitude of retailers and our customers when it comes to sustainability issues.
	Employees	Our people are important to us. Our company has many programmes to ensure personal development opportunities and a safe and healthy work environment. We have regular business updates and our intranet "Nutranet" provides regular update of events.
Social	Local community	Supporting local communities will secure the long-term prosperity of Skretting. Our policies and practices can create economic value in a way that also creates value for society by addressing its needs and challenges.
Economic	SHV	SHV, the owner of Nutreco and Skretting, has ambitions within the area of sustainability and have clear requirements to the sustainability performance of the companies they own and finance.
Value chain	Retailers	In many ways, retailers echo the demand and wishes of the consumer. They influence us in many ways. They set requirements to our customers and they often demand extensive documentation of our sustainability performance - for example through certification or private specification and audits.
	Farmers	Our customers are companies that produce aquaculture species typically for human consumption as seafood. Our company provides feed and in addition technical assistance through our service team and customer events. Information is made available via our website, customer magazines and we facilitate engagement through global forums, meetings and site visits.
	Suppliers	Our procurement department is actively engaged with our raw materials suppliers on a daily basis. We also have strategic engagement activities and workshops with suppliers and potential suppliers to identify opportunities or improvements within the supply chain. Suppliers are also invited to take part in the AquaVision conference.
Environmental	Legislating bodies	Governments are active in updating and developing new environmental legislation. We engage with government through our association with leading industry bodies. Our employees also give advice to government bodies on a variety of issues such as aquaculture feed legislation and issues relating to food safety.
	NGOs	Non-Governmental Organisations are instrumental in focusing on our sustainability challenges both within the environmental and social area. We cooperate with and learn from NGOs and at times we are critised for our activities. This can influence the perception of our work within the sustainability area.
Technical	Research institutes	We cooperate with many research institutes in the area of sustainability. For many years we have worked on reducing the dependency of marine raw materials. In later years more work has been dedicated towards reducing carbon emissions and deforestation. Research institutes develop new knowledge and methodology in these areas that we can use in our work.

#### Global stakeholder platforms

Together with our parent company Nutreco, we are involved in a number of multi-stakeholder initiatives to improve sustainability in aquaculture. We would like to highlight the following engagements.

#### MarinTrust

MarinTrust, formerly known as the Global Standard for Responsible Supply (IFFO RS) has become the leading independent business-to-business certification programme for the production of marine ingredients. Skretting is a member of the MarinTrust governance board. The main purpose of the standard is:

- To ensure that whole fish used come from fisheries managed according to the FAO Code of Conduct for Responsible Fisheries
- To ensure no Illegal, Unreported and Unregulated (IUU) fishery raw materials are used
- To ensure pure and safe products are produced under a recognised Quality Management System, thereby demonstrating freedom from potentially unsafe and illegal materials
- To ensure full traceability throughout production and the supply chain

# Sustainable Fisheries Partnership (SFP)

Skretting is a sponsor of the SFP. This nonprofit organisation fills a specific gap between industry and the marine conservation community, utilising the power of the private sector to help less well-managed fisheries meet the environmental requirements of major markets. Their work is organised around two main principles: making available up-to-date information on fisheries for the benefit of major buyers and other fisheries stakeholders; and using that information to engage all stakeholders along the supply chain in fisheries improvements and moving toward sustainability. SFP operates through two main principles: information and improvement.

#### Global Salmon Initiative (GSI)

An important way in which Skretting is helping advance the salmon sector is through its membership of the Global Salmon Initiative (GSI). In partnership, GSI salmon farmers and feed companies have committed to working precompetitively together to accelerate progress towards ever increasing standards of sustainability for the farmed salmon industry, and to driving progressive innovation in the feed sector.

Skretting is a proud Associate Member of GSI. These are organisations that have a shared interest in the continued growth and prosperity of the farmed salmon industry as well as a shared commitment to improving the sustainability of the sector.

Associate Members work closely with the GSI members on specific projects where shared knowledge and collaborative working will support accelerated progress.

#### The ProTerra Foundation

Skretting is member of the ProTerra Foundation which is a not-for-profit organisation that advances and promotes sustainability at all levels of the feed and food production system. A commitment to full transparency and traceability throughout the supply chain and concern for corporate social responsibility and the potential detrimental impact of herbicide-resistant, genetically modified crops on ecosystems and biodiversity is at the heart of everything we do.

Independent third-party certification is central to the Proterra Foundation. ProTerra certification ensures that high quality supplies of crops, food, and feed are independently certified and produced with improved sustainability.



#### **UN Global Compact**

Nutreco is a member of The United
Nations Global Compact programme. This
is a non-binding United Nations pact to
encourage businesses worldwide to adopt
sustainable and socially responsible policies,
and to report on their implementation. The
UN Global Compact is a principle-based
framework for businesses, stating ten
principles in the areas of human rights, labor,
the environment and anti-corruption. Under
the Global Compact, companies are brought
together with UN agencies, labor groups and
civil society. Nutreco has been a member
since 2015.

# The Round Table on Responsible Soy (RTRS)

Nutreco is member of RTRS, which is a civil organisation that promotes responsible production, processing and trading of soy on a global level. RTRS encourages current and future soybean to be produced in a responsible manner to reduce social and environmental impacts while maintaining or improving the economic status for the producer through the development, implementation and verification of a global standard.

# New York Declaration on Forests (NYDF)

Skretting is a signatory of NYDF, which is a voluntary and non-binding international declaration to take action to halt global deforestation. It was first endorsed at the United Nations Climate Summit in September 2014, and by October 2017 the NYDF supporters grew to include over 191 endorsers: 40 governments, 20 sub-national governments, 57 multi-national companies, 16 groups representing indigenous communities, and 58 NGOs.

These endorsers have committed to doing their part to achieve the NYDF's 10 goals and follow its accompanying action agenda.

#### SeaBOS

In 2019, Skretting continued to be a key contributor to the Seafood Business for Ocean Stewardship (SeaBOS) initiative. CEOs from the ten largest global seafood companies have joined forces through SeaBOS to create transformative change. The work is divided into five task forces: (1) Illegal, Unreported and Unregulated (IUU) Fishing & Modern Slavery, (2) Transparency and Traceability, (3) Improving Regulations, (4) Internal Governance and (5) Innovation.

# Roundtable on Sustainable Palm Oil (RSPO)

Nutreco has been a member in good standing of RSPO since near its inception.

Committed to this multi-stakeholder platform, we purchase green palm certificates for all our palm oil products excluding kernel oil.





# Aquaculture Stewardship Council (ASC)

Established in 2010, the ASC is a robust and credible environmental/social standard in the farmed seafood sector. It currently has over 1.6 million tonnes of farmed seafood independently certified and compliant to the standard. Nutreco's Sustainability Director sits on the Supervisory Board of the ASC. Currently Skretting is a member of the steering committee overseeing the work related to develop an ASC Feed Standard.



# Sustainable Shrimp Partnership (SSP)

Skretting is a founding member of the SSP. The SSP is a group of leading companies who share one mission: to make shrimp aquaculture a clean, stable, and successful practice for the world. In order to reach that goal, the leaders have set a clear and ambitious plan to elevate the whole sector to the next level.

#### Global Aquaculture Alliance (GAA)

Skretting is a member of GAA, an international non-profit organisation that promotes responsible aquaculture practices through education, advocacy and demonstration. For over 20 years, GAA has demonstrated a commitment to feeding the world through responsible and sustainable aquaculture.

It does this by providing resources to individuals and businesses worldwide who are associated with aquaculture and seafood. They improve production practices through partnerships with countries, communities and companies, as well as online learning and journalism that has an active readership in every country of the world.

#### GlobalGAP

Skretting is member of GlobalGAP which is an organisation that has developed criteria for food safety, sustainable production methods, worker and animal welfare, and responsible use of water, compound feed and plant propagation materials. Skretting is also a member of the technical committee that oversees the GlobalGAP aquaculture standard.

# European Feed Manufacturers' Federation (FEFAC)

Nutreco is a member of the FEFAC Sustainability Committee, which meets two or three times each year in Brussels to address sustainability initiatives associated with the European feed industry.

A positive outcome of this committee was the roll-out of the FEFAC Soy Sourcing Guidelines, which lay out the minimum criteria that purchasing feed mills could incorporate when making their soybean, soybean meal and soy concentrate purchases.

#### Cerrado Manifesto Statement of Support Group

Established in 2017, Nutreco was one of 23 founding member signatories to the Cerrado Manifesto Statement of Support Group (SoS). The SoS has become the world's largest business-driven group calling for immediate action in defence of the Cerrado by supporting local and international stakeholders.

Today, there are 132 company signatories to the SoS across agro-industrial, farming and food processing, finance, packaged consumer goods, retail and foodservice and other supporter groups. Its key focus in 2019-2020 is to support the activity of the Brazilian Grupo de Trabalho do Cerrado (GTC) by accelerating the transition to deforestation and conversion-free soy production and to share knowledge and action plans with key Chinese companies and stakeholders.

#### Governance

All Operating Companies (OpCos) producing for aquaculture are in the Skretting division and those dealing predominantly with land animals are part of Trouw Nutrition division. Nutreco has also established a group responsible for overseeing innovation and disruptive business ideas. Therese Log Bergjord is Chief Executive Officer of the Skretting division and is a member of the Nutreco Executive Committee.

Rob Koremans is the CEO of Nutreco. The Corporate Sustainability Director, Jose Villalon, continues to report directly to the CEO, Chair the Nutreco Sustainability Platform (NSP) and represents Nutreco on issues pertaining to sustainability with Nutreco's owners, SHV, through the SHV-Sustainability Platform.

#### Skretting sustainability governance

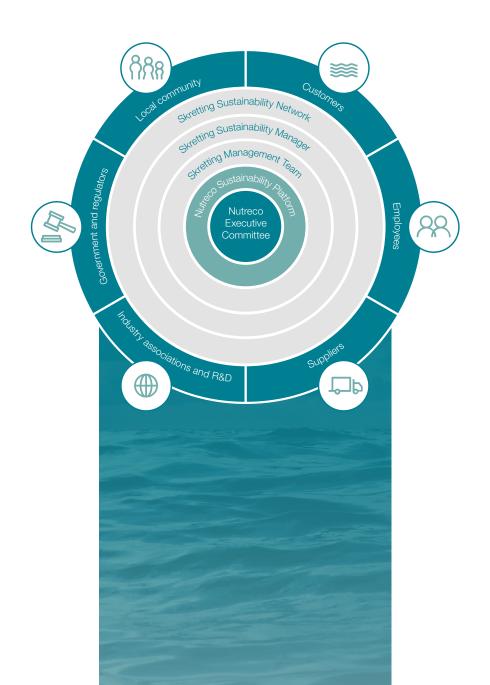
The Sustainability Manager in Skretting, Trygve Berg Lea, reports to the Brand Director. Each OpCo has a Nuterra Champion that serves as a coordinator for sustainability and who devotes 20-30% of their time executing sustainability-related tasks and providing feedback to the Nutreco Sustainability Plaform (NSP) on sustainability issues that are relevant to their OpCos.

The Skretting sustainability manager is a member of the Nutreco Sustainability Platform (NSP). The NSP meet monthly and govern sustainability policy within Nutreco and continues to have broad representation by the business with four members. Typical sustainability governance begins with sustainability policy and/or action being developed by consensus agreement within the NSP after which the Chair proposes action at the ExCo level. If approved, it returns to the NSP where it is communicated to the Nuterra Champions and their respective General Managers across all OpCos.

#### Ethics and legal compliance

In July 2019 Nutreco released a new Code of Conduct to all employees. The Code of Conduct defines what Nutreco believe is the right way to do business. It captures the essence of our internal standards. Next to Ethics & Compliance, the Code covers corporate sustainability, product safety, HR, HSE, travel security, IT and social media.

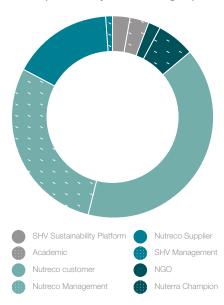
The Code makes clear what Nutreco expects from both company and individual employees and how to deal with ethical dilemmas. It poses key questions in case of doubt and details how to get support. When Nutreco and its employees act consistently with this Code they behave in accordance with our values and company policies and in compliance with the law.



#### Materiality

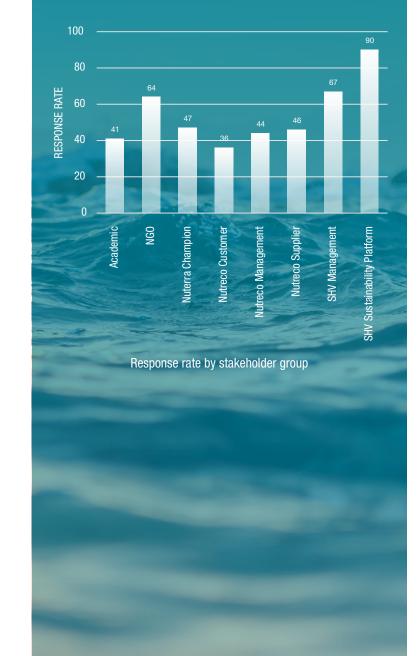
Our materiality assessment was done together with Nutreco. The materiality assessment was based upon 293 responses to a questionnaire sent to 700 stakeholders (a 42% participation rate). Of these responses, 35% were internal stakeholders and 65% external, of which 40% were Nutreco customers. NGOs academics, suppliers and management are also represented. A demographic analysis of participants is shown below.

Respondents by stakeholder group



Our RoadMap to 2025 will be based on this materiality assessment, which addresses the major issues perceived by our stakeholders to be important or to be issues we can have influence due to our position in the food value chain. The materiality assessment does not reflect whether an issue is material or not for society. In other words, a low material score on issues such as water use, waste generated or energy does not mean that these issues are not important for our planet, but rather that stakeholders do not believe Skretting and Nutreco have a potentially game-changing role in mitigating them. For example, we do not use enough energy or water to be a major influencer on these impacts.

The lower-tier score on "climate change" resulted from a misunderstanding of the scope of the issue. Respondents did not consider Nutreco's role in influencing the climate change impacts of its suppliers, and instead only considered Nutreco's relatively low manufacturing footprint. Nonetheless, at Nutreco, we assume our role as a good corporate citizen to responsibly address even issues with low materiality.





Here are the results of our materiality assessment, which uses a scale of 1.0 to 4.0. If an issue scored less than three (3.0) we arbitrarily judged that, though it may be important, Nutreco's role in it is non-critical (in comparison to other industry sectors); issues scoring between 3.0 and 3.4 were considered important and material to Nutreco; and issues scoring greater than 3.4 were considered highly important and highly material for Nutreco to take priority action on.

Though we will address all issues highlighted in our materiality assessment, we will focus our resources on having a transformational impact on the highly material issues.

