

LEIDAR



**nuterra™**

**Our sustainability programme**  
It's not just what we aspire to do,  
it's what we do

**Sustainability report**  
Australia · 2016



[www.skretting.com.au](http://www.skretting.com.au)  
[www.nutreco.com](http://www.nutreco.com)





nuterra™

*nutreco*



nuterra™

SKRETTING  
a Nutreco company



# **Sustainability report**

Australia · 2016

# Nuterra, a bolder step

Jose Villalon, Sustainability Director at Nutreco



**In order to facilitate sustainable food security, farming – whether on land or in the water – needs to evolve through the adoption of new techniques and technologies much faster than at present. Bolder steps are essential at every level, including animal and aquatic feeds, so that resources everywhere are used more efficiently, environmental impacts are reduced and productivity is elevated. At Nutreco, these ambitions are an integral part of our strategy and are realised through the delivery of highly innovative, sustainable nutritional solutions.**

Our new global sustainability programme, Nuterra, provides the vision and actions needed to ensure that we live up to our responsibilities and ambitions throughout our business. Crucially, Nuterra makes it easier for us to package sustainability in a practical way that provides the most value for our customers. All of our customers sell their products in very competitive marketplaces, but by being able to explain what we as their feed company are doing in terms of sustainability and why, translates directly into what they, our customers, are doing from a sustainability standpoint and helps them distinguish themselves further.

Another important objective fulfilled by Nuterra is the capacity to hold ourselves accountable in terms of what we aspire to achieve over the timeframe designated in our Nuterra Roadmap, which aligns our actions and initiatives over a period of multiple years. Essentially, Nuterra is a comprehensive platform that makes sure Nutreco is indeed 'walking the talk' and directly supporting our customers' sustainable products.

Another new direction that we took this past year was a realignment of our Nuterra Roadmap with the recently launched 2016 United Nations' Sustainable Development Goals (SDGs). These SDGs define global sustainability

priorities and seek to mobilise efforts around a common set of targets. They encourage businesses to seek opportunities for creating shared value for their own benefit as well as for society in general. For Nutreco, this is both valid and exciting as it ensures that we align with this global initiative within the private sector and it helps guide us in pulling all of our initiatives in a common direction. In other words, while we each have a part to play, the cumulative effect of a shared focus helps piece solutions together in a much more efficient way.

Alongside these advancements, we also joined a number of multi-stakeholder platforms and formed partnerships with other strategic stakeholders to address specific environmental impact issues. As well as conventional platforms related to responsible soy, responsible fishmeal and fish oil and responsible aquaculture and feed, our CEO participated in the new Seafood Business for Ocean Stewardship initiative.

**Collaborative programmes such as these are essential to progress towards our company-wide Mission of 'Feeding the Future', while contributing to the second UN Sustainable Development Goal – Ending Hunger.**

# Confident steps on our sustainability journey



James Rose  
Managing Director of Skretting Australia

But while we are working to reduce the reliance on marine ingredients, we shouldn't stop using those high-quality, sustainably sourced raw materials that are available to us. In the words of Andrew Mallison, Director General IFFO, we can develop alternatives "as well as, not instead of" where these criteria are met. The Peruvian anchoveta fishery has long been a key strategic supplier to our operations. Skretting recently entered into a collaborative Fishery Improvement Project (FIP) with Cargill Aqua Nutrition and the Peruvian fishmeal and fish oil industry. This FIP aims to strengthen research, management and sustainability of the fishery and will include a benchmark against the Marine Stewardship Council (MSC) fisheries standard. The project will continue to drive the responsible production of fish feed throughout all aspects of our supply chain.

In 2016, the rewards of previous investments combined with effective management by our manufacturing team saw every sustainability performance indicator improve compared to the previous year – less energy, less water, less waste, higher efficiency and higher quality results. This was an outstanding achievement in a year that also saw significant volume growth. Following a series of workshops with all of the Skretting employees we also developed our Sustainable Business Action Plan which is full of innovative ideas that we are now working our way through.

Strong results and novel ideas have also led to strong support for on-going capital investment in our plant. We have a significant investment programme to implement over the next few years and this in turn will underpin our ambitions to manufacture more efficiently, to further reduce our environmental footprint.

Much media attention was focussed on the Tasmanian salmon industry in 2016 and continues today. It was disappointing that a negative agenda and very selective editing has been directed at some of the ingredients used in salmon feeds. All the ingredients we use are very fit for purpose; indeed many are available on the shelves of health food shops. However, in light of this negative reporting, we will continue to give attention to getting the real message out.

Finally, I want to take this opportunity to thank Jenna Bowyer, our Sustainability and Communications Officer, for her tireless work in these crucial areas over the past four years. Jenna has accepted a new position with Skretting in Stavanger, Norway, and leaves us with our very best wishes. I know that that from afar she will continue to keep a caring eye on us.

**Feeding the future!**

**Welcome to the 2016 Sustainability Report from Skretting Australia. During the past year we continued to implement a range of actions that further strengthened our overall sustainability position and delivered increasing value and security to our customers.**

Having successfully reduced the fishmeal use in our salmon diets to 5% in 2015, last year we followed through with our ambition to develop a 0% fishmeal product capable of producing fish of equal growth, health and quality as a standard diet with the launch of the ground-breaking Microbalance FLX.

The aim of reducing marine product use is driven by the increasing scarcity and broader application of these raw materials, as well as the impacts that potential overexploitation and climate events (such as El Niño) can have on the source fishery and regional ecology. The next major challenge will be to reduce the industry's reliance on fish oil, currently the only practical dietary source of long-chain omega-3 fatty acids which are essential for fish health and for healthy seafood for human consumption.

Solutions are currently being evaluated and we fully expect to see a zero fishmeal, zero fish oil feed for salmon commercially available in 2017/18. The technology in our industry is evolving at a very rapid rate, providing evermore efficient and sustainable solutions. This is an important message that we must all share much more readily with the general public.

# SUPPLIERS

## MARINE

Majority of the marine ingredients used in our feeds are sourced from wild capture fisheries. These resources are limited and if not managed properly can contribute to overfishing, biodiversity loss and human rights violations.



## AGRICULTURAL

The production of crop based feed ingredients require the input of limited resources such as energy, fertiliser, land and water. If not managed properly feed ingredients can contribute to a loss of biodiversity, climate change and human rights violations.

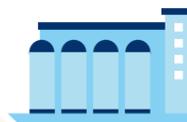


### The road to double production

### The road to half the footprint

Our operations are built upon a solid foundation of human resources who have the power to drive the business forward if provided with favourable labour conditions and a safe working environment.

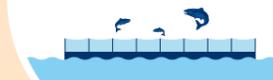
## PRODUCTION



Our factories use limited resources such as energy and water to transform feed ingredients into nutritional solutions. In this process we also create GHG emissions, effluents and waste which can have detrimental impacts.

Aquaculture farming performance is determined by animal health, nutrition and farm management. Providing integrated solutions that address all three will enable farmers to maximise efficiency, minimise waste and maintain animal health and welfare. This includes models that accurately match requirements to the feeding strategy.

## CUSTOMERS



The misuse of antibiotics in farming can lead to the development of resistant bacteria. This can have serious implications for animal health and welfare as common drugs are no longer effective to treat infections if they occurs.

Consumers around the world are demanding high quality and nutritious seafood – fish and shrimp. Meeting this demand will require innovative solutions that improve the nutritional composition, taste and yield of fish and shrimp products.

## CONSUMERS



Lack of dynamic quality assurance and control at every stage of production can result in food safety issues for the end consumer.

### DOUBLE PRODUCTION

### HALF THE FOOTPRINT

**WHERE WE ARE LOCATED  
OUR GLOBAL SUSTAINABILITY EFFORT**

**IMPORTANT FARMED SPECIES WE DELIVER FEED TO:**

Fishes; Atlantic salmon, barramundi, Chinook (king) salmon, native Australian species, rainbow trout and yellowtail kingfish. Molluscs; Abalone.

**Australia: 76 Employees**  
(60 Male and 16 Female)

**Australia:**  
>90,000 tonnes of feed

**Australia:**  
Production in Hobart, Tasmania, Australia

**Globally: 2,905 Employees**  
(2,450 Male and 455 Female)

**Globally:**  
2 million tonnes of feed

**Globally:**  
Production in 18 countries

- PRODUCTION
- JOINT VENTURE
- UNDER CONSTRUCTION

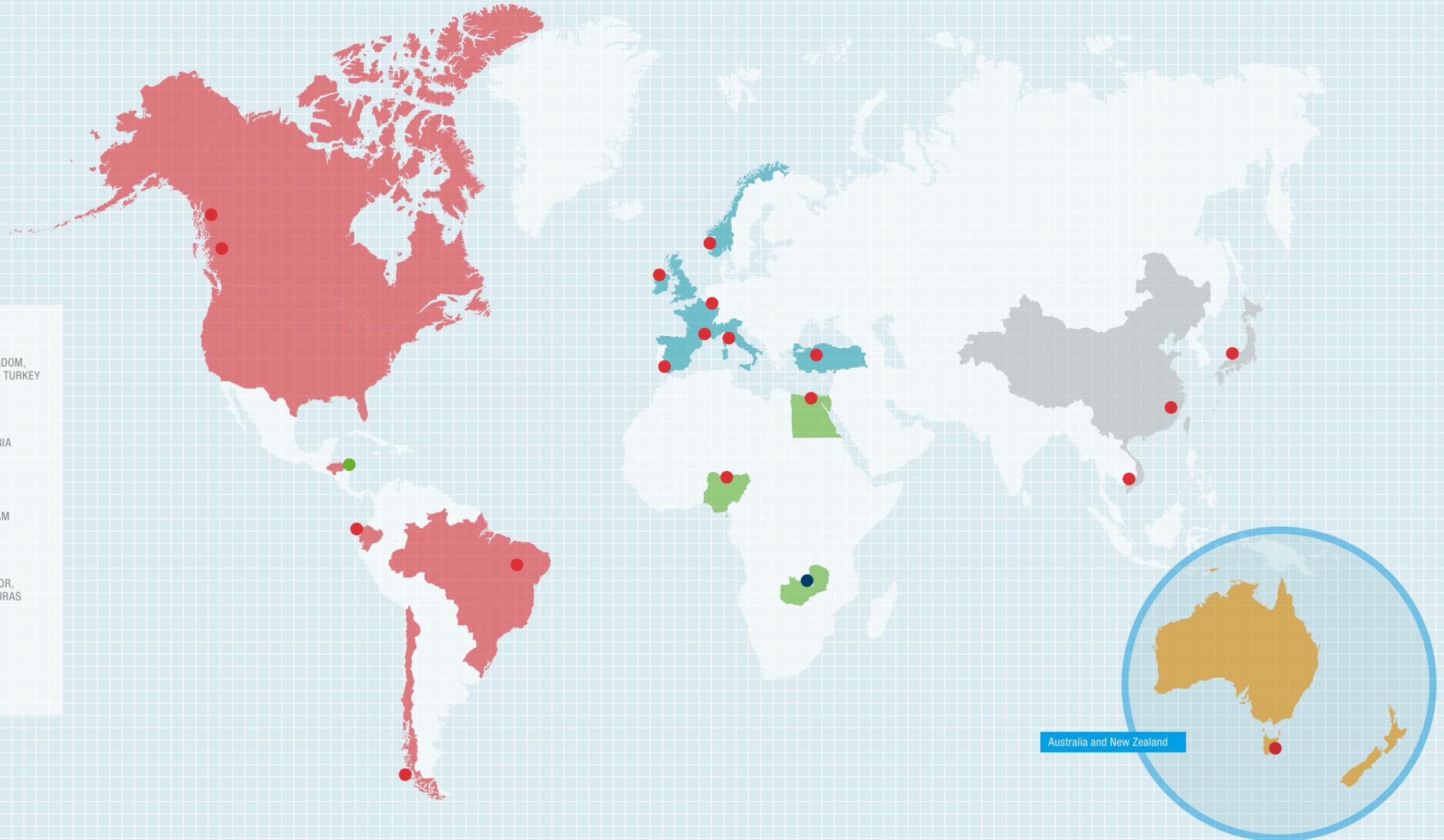
**EUROPE**  
NORWAY, UNITED KINGDOM,  
FRANCE, SPAIN, ITALY, TURKEY

**AFRICA**  
EGYPT, NIGERIA, ZAMBIA

**ASIA**  
JAPAN, CHINA, VIETNAM

**AMERICAS**  
CANADA, USA, ECUADOR,  
CHILE, BRAZIL, HONDURAS

**OCEANIA**  
AUSTRALIA



Australia and New Zealand

# Our Nuterra programme

The Nuterra programme sets out Nutreco's sustainability strategy and provides the tools required to implement this throughout our company. The Nuterra programme is made up of three distinct components.

## Nuterra Roadmap

Our Nuterra Roadmap sets clear ambitions regarding people, planet and profit. It is an aspirational vision designed to align our actions and initiatives over a period of several years, as we work to fulfil our Mission of 'Feeding the Future'. These objectives are aligned with the long-term goals of our strategy as well as the UN Sustainable Development Goals.

The roadmap is grouped into four areas:

 Nutritional Solutions

 Ingredients

 Operations

 Commitment

## Nuterra Standard

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

Our operations undertake this assessment biannually to ensure that we hold ourselves accountable in our sustainability aspirations and targets.

## Nuterra Product Assessment

The Nuterra Product Assessment is a tool that helps us to measure the environmental impacts and attributes of our nutritional solutions. It uses Life Cycle Assessment methodology to systematically evaluate the environmental aspects of using our products and services.

Important indicators of measured sustainable nutritional solutions include greenhouse gas emissions, acidification, eutrophication and energy use.



## NUTRITIONAL SOLUTIONS

Enabling the animal and farmer to perform better

- Farm and feed performance
- Animal health and welfare
- Young animal feed
- Minimise food safety risks



## INGREDIENTS

Creating a sustainable base for feed

- Responsible sourcing
- Sustainable partnerships



## OPERATIONS

Ensuring our own house is in order

- Reducing environmental impact in our operations
- Improving our own working environment



## COMMITMENT

Involving people in the challenge of 'Feeding the Future'

- Employee engagement
- Stakeholder engagement
- Community development





## Nuterra supports the UN Sustainable Development Goals

In 2015 the United Nations introduced a set of goals 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 over the next 15 years. For the goals to be reached, everyone needs to do their part: governments, the private sector, civil society and people like you.

Skretting believes that our Nuterra programme within many areas is aligned with the UN Sustainable Development Goals (SDGs). Our Mission of **'Feeding the Future'** is about fulfilling goal number 2; **End hunger, achieve food security and improved nutrition and promote sustainable agriculture.**

If done right, agriculture, forestry and fisheries can provide nutritious food for all and generate decent incomes, while supporting people-centered rural development and protecting the environment. Skretting is proactive in positively influencing the sustainability of aquaculture. Our Nuterra programme details the measures we have in place to ensure we are supporting a growing world population.

Also each of the four pillars in the Nuterra programme: **Nutritional solutions, Ingredients, Operations and Commitment** – addresses several of the UN sustainability goals within specific areas. So to a large extent our Nuterra report is a report describing how we work and what we have achieved to support the United Nations in their effort to establish a new sustainable development agenda.

Our Nuterra programme within many areas is aligned with the UN SDGs. Our mission "Feeding the future" to us is about fulfilling goal number 2; "End hunger, achieve food security and improved nutrition and promote sustainable agriculture."



Our mission  
*feeding the future*  
nuterra



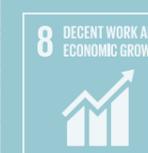
### Ingredients



Working against net deforestation  
Marine ingredients from responsibly managed fisheries  
Preventing loss of biodiversity due to valuable habitats being converted into agricultural land



### Operations



A valued working place in our local community  
Reduce GHG emissions from our operations  
Energy, water and waste reduction



### Nutritional Solutions



Resource efficient nutritional solutions  
Finding alternatives to limited marine resources



### Commitment



Enter into dialogues with stakeholders and engage in community development projects



# Nutritional Solutions

Skretting's unique combination of products, services and models are designed to help farmers boost productivity, support animal health and minimize negative environmental impacts, and by doing so we address three UN SDGs.



Antimicrobial Resistance (AMR) is a serious health concern that is predicted to overtake cancer as the leading cause of death by 2050. The rapid progression of this is believed to be caused by the misuse and overuse of antibiotics in people and animals. To address this issue in aquaculture there must be a reduction in the non-therapeutic use of antibiotics for growth promotion or to prevent disease needs. Skretting offers nutritional solutions that help farmers to reduce their reliance on antibiotics without impacting growth. This adds value to the farmer in terms of productivity as well as helping to address AMR.



Feeds are a major source of the economic and environmental costs associated with animal production. Skretting offers a range of Nutritional Solutions which help farmers to reduce these costs by enabling them to produce more from less. This includes MicroBalance FLX (reducing dependency upon fishmeal), Shield (repelling lice from salmon), Lorica (supporting good health in shrimp) and feed for cleaner fish used in salmon farming (cleaner fish eats lice and reduce the need for chemical treatments).



As the population grows, so too does the demand for seafood with per capita consumption doubling from the 1960 until now. The majority of this growth has been supplied by aquaculture which currently represents 50% of global seafood consumption. Ironically this rapid expansion could increase pressure on wild fish resources which have traditionally been a major source of the vital nutrients used in aquafeeds. After years of research at Skretting ARC we are now able to produce fishmeal-free diets. This not only creates value for our industry by enabling continued growth, it also benefits society by taking pressure off precious marine resources.

## Nutra RC feed contributes to hatchery nutrient re-capture

**Salmon smolt production in Australia utilises modern recirculation technology, not least because it enables strict control of environmental conditions that result in improved smolt quality and supply. These production systems also bring about their own unique challenges, in particular dealing with organic matter in the water column and the need for efficient removal of faecal matter.**

To meet these and other issues head on, Skretting developed its RecircReady concept. Developed by the Skretting Aquaculture Research Centre (ARC) through extensive trials at research facilities in Norway and Italy, RecircReady feeds incorporate very specific patented functional ingredients that bind faecal matter. In recirculation systems, this means it is easier to filter and remove solid waste particles, thus the amount of suspended solids in the system.

Australia's largest salmon producer, Tassal, recently commissioned its second recirculation smolt facility, Rookwood 2, alongside its existing Rookwood 1 facility (constructed in 2009), near Ranelagh, south of Hobart. A total eight million smolt (160g average weight) are produced by the two facilities per year. Although it is located next to the Huon River, the hatchery is supplied by bore water. About 98%+ of the water is being recirculated. The remaining 1-2% is waste water and any solids are removed before being irrigated to local farmland.

Craig Selkirk



Craig Selkirk, Senior Manager for Freshwater at Tassal, says, "For us, a hatchery diet has to perform not just in terms of fish growth, but it is also vitally important how it performs in relation to water quality and waste management.

"The functional ingredients in Nutra RC help to bind up the faeces, which significantly improves water clarity and hygiene by facilitating solids removal. That's especially important to us because of the very high rates of recirculation that we operate at.

"The hatcheries are tightly regulated on the quality of the waste water that we irrigate to local farmers. As the functionality of Nutra RC improves solids stability, it assists us with dewatering of solids that are transported off-site for agricultural re-use. This makes it more cost-efficient for us to transport and an important part of our hatchery compliance strategy."



Polly Hilder

## DEDICATED RESEARCH Addressing local farming challenges

**The Experimental Aquaculture Facility (EAF) is the first of its kind in the southern hemisphere. It is jointly sponsored by the University of Tasmania, industry partners Huon Aquaculture and Skretting Australia. The focus is on commercially relevant research, which aims to improve the health, nutrition and growth of Atlantic salmon.**

Since its commissioning, Dr Polly Hilder has been managing the Experimental Aquaculture Facility.

“I wanted to manage the EAF because it was an opportunity to work in a multi-million dollar state-of-the-art facility, with the support of industry and research institutions. This is where real solutions could be made to industry and the knowledge base for Atlantic salmon could be increased,” Dr Hilder says.

The majority of Atlantic salmon research is northern hemisphere-based with different climatic conditions and issues. “This is a big selling point for the EAF; locally-based research on Tasmanian Atlantic salmon, under our unique conditions, with our specific challenges,” says Dr Hilder.

The EAF has specifically been designed to investigate the two biggest issues affecting the Tasmanian salmonid industry, namely increasing summertime temperatures and amoebic gill disease (AGD). Concentrated research in the controlled environment at the EAF with collaboration from leading industry experts and scientists will move the industry forward. Research at the EAF will endeavour to understand the causes of issues that affect salmon growth and mortality and find solutions to these challenges.

Skretting Australia’s Product Manager, Dr Nicole Ruff says, “We have been eagerly awaiting the opportunity to test new diet concepts. In April 2016, we started our first trial which investigated several new feed concepts designed to improve the growth of large Atlantic salmon at high temperature. The outcome from the trial was very pleasing. The fish performed well and both growth and feed conversion exceeded typical commercial expectations for fish of similar size under prolonged high temperature exposure. We are looking forward to offering a new feed solution for our customers’ summer feeding strategies going forward.”

Dr Hilder summarises by saying, “Research, as displayed in Skretting’s first trial, provides important information to the Atlantic salmon industry tackling climate change and culture of fish in warmer summer waters. We look forward to ongoing trials and the continued expansion of knowledge that will assist the production of Atlantic salmon in Tasmania.

“In addition to investigating temperature, nutrition, and AGD, the refinement of RAS (recirculating aquaculture system) technology specifically designed for Atlantic salmon has the potential to assist the industry in going forward. Land-based aquaculture while expensive compared to sea-cage farming has a number of significant benefits. RAS has the benefit of improved growth, survival, control of effluent outputs, biosecurity, security, accessibility and risk mitigation,” says Dr Hilder.

RAS technology is currently employed by commercial salmon hatcheries. There may be potential to further refine RAS technology which could be used to on-grow smolt prior to transfer to sea or potentially grow the fish exclusively on land.



Scott Hayward

“By using Protec Gill our prevalence of bacterial gill disease dropped significantly in the first three months of stocking fingerlings, along with the aid of other management practices. We have increased our juvenile survival by up to 20% in some ponds. Going forward, we are looking for more consistency in our juvenile survival and we see Protec Gill as playing an important part in that,” says Hayward.



## PROTEC GILL Supporting barramundi through transfer

**The role that functional feed ingredients play in supporting farmed fish health, and in turn, improved sustainable and economic production has been a major focus for Skretting Aquaculture Research Centre over the last 25 years.**

Today, Skretting’s Protec solution is used for a number of species worldwide, and is effective in preparing the fish for upcoming stress and challenges in farm conditions, such as handling, vaccination and diseases. It is recognised as the leading and most comprehensively documented functional feed on the market.

In 2015, Skretting Australia first launched Protec Gill, a new feed that better supports gill health and recovery during environmental, treatment and disease challenges. As the name implies, it contains the full Protec package, which acts synergistically with additional components that ensure better gill health.

In 2016, Protec Gill was launched into the Australian barramundi market. Scott Hayward, Farm Manager at Sealord King Reef Barramundi, says, “At King Reef we started using Protec Gill to lower fish gill stress immediately after long hours of transport and acclimation from the hatcheries into the grow-out ponds. Our site also has very mineral-deficient source water, which makes gill health a real challenge for small barramundi.”

Skretting Australia’s Product Manager Nicole Ruff says, “King Reef’s application of Protec Gill is a great example of how we can support the barramundi’s gill health through a stressful event such as transfer of fingerlings. We know that this will have longer-term benefits further down the production cycle which will ultimately be of great benefit to our customer.”



MICROBALANCE FLX

## A step change in fish feed flexibility



**Skretting Aquaculture Research Centre (ARC) has devoted significant resources over the past three decades to exploring the potential for alternative raw materials to replace traditional marine-based feed components while ensuring the final fish products retain the eating and nutritional qualities that consumers expect. Aligned with this ambition, one of our biggest sustainability objectives has been to develop the capability to become independent of fishmeal. This ambition is now a reality, with the 2016 launch of MicroBalance® FLX.**

Through our research, we have detailed evidence proving salmonids can be fed with feeds with low to zero fishmeal. Because salmon require specific nutrients, not particular raw materials, it is just as straightforward for fish farmers to predictably produce fish of identical growth, health and quality with a low to zero fishmeal diet as it is with a standard diet. Through the unique technology in MicroBalance FLX, it provides us with unprecedented formulation flexibility and enabling salmon farmers to produce more from less in a sustainable way.

At the same time, Skretting Australia conducted a commercial scale study comparing our Premium diet (5% fishmeal) with Premium FLX (0% fishmeal) at a seawater farm site growing out Atlantic salmon. There were no differences in salmon growth, size and feed conversion. This confirms that the comprehensive documentation of the FLX solution transfers to the specific growing conditions and fish strain farmed in Australia.

“The arrival of MicroBalance FLX and becoming independent of fishmeal is a major breakthrough for the salmon sector and the aquaculture industry as a whole. Making a finite resource like fishmeal interchangeable – just like any other raw material – is crucial progress. However, FLX does not bring an end to Skretting ARC’s MicroBalance research. Quite the contrary, it is providing the platform to explore more alternative and novel raw materials for application with many more commercially farmed species with a view to progressing the sustainable growth of the global aquaculture sector further,” says Leo Nankervis, Skretting Australia Marketing Manager.



Leo Nankervis



# Ingredients

Skretting is always seeking to expand our knowledge of the nutritional composition of feed ingredients as well as the impacts of the supply chains that create them. This helps us to deliver products that enable farmers to produce more from less, and by doing so addresses three UN SDGs.



Responsible production and consumption requires us to 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 which is signed by suppliers. Compliance with these requirements is then checked during supplier audits. We are also able to assess the environmental impacts of common feed ingredients using the detailed database which forms the basis of our Nuterra Product Assessment. From this we can model the impacts of different feed formulations which create value for us and our customers by helping us to become more informed about the implications of our production processes.



The United Nations estimates that 31.4% of the world's fisheries are overfished and a further 58.1% are fished at full capacity. With 10% of the total global catch used to make fishmeal and fish oil the aquaculture industry plays a vital role in ensuring these stocks are well managed. To address this Skretting and Nutreco has identified minimum sourcing criteria for marine products in our Supplier Code of Conduct and the Nuterra Standard. We have also partnered with other industry players, governments and NGOs in Vietnam and Peru to establish Fisheries Improvement Projects (FIPs). This creates shared value by improving the state of the world's fisheries resources whilst also ensuring the supply of sustainable fishmeal and oil into the future.



The production of feed ingredients has significant impacts to life on land. This includes GHGs, biodiversity losses and nutrient enrichment that arise from land clearing, fuels, pesticides and synthetic fertilisers. At Skretting and Nutreco we are dedicated to reducing these impacts by working with our suppliers. Our primary tool to do this is our Supplier Code of Conduct which outlines what we require of our suppliers in regards sustainability.



## Pro-active approach to responsible sourcing

Skretting Australia, through collaboration with FishListic, has taken a pro-active industry-leading initiative, embarking on a journey toward long-term sustainable and responsible sourcing, by gaining a greater understanding of the raw marine material and associated supply chains to minimise environmental, social and economic impacts.

Gaining a better understanding of our supply chain is important if we are to secure long-term access to sustainable and responsibly sourced marine products. Dr Sarah Irvine from FishListic says, "A greater understanding of the products and where they originate enables you to measure changes in the seafood supply, identify problems, and take action to improve supply over time." This year, FishListic conducted risk assessments for Skretting Australia based primarily on Nutreco's Code of Conduct (CoC) and the globally recognised Marine Stewardship Council Fisheries Standard.

Jenna Bowyer, Sustainability Officer at Skretting Australia says "It is important to Skretting Australia that all of our ingredients are sourced and produced in an environmentally and socially responsible manner. Nutreco has a Code of Conduct supplement specifically for marine products, as we recognise the multiple concerns that society has on marine ingredient sources being used in aquaculture. However, by working with FishListic, we wanted to take the first steps beyond our Code of Conduct and take a deeper look at our raw material supply chain".

By assessing the ecological sustainability and social elements of marine products and supply chains, Skretting Australia can meet the current future needs and requirements of its customers.

With increasing awareness and demand globally for sustainable and responsible products, it is important for Skretting Australia to be able to identify any violations against the CoC. With such information, Skretting Australia can make informed, holistic purchasing decisions. This will minimise brand risk, improve the credibility of our products, and limit the occurrence of any downstream risks to our customers.

Who is FishListic? FishListic is a sustainable seafood consultancy for wild capture fisheries and aquaculture operations. As a science-based, solutions-orientated consultancy, FishListic offer's a fresh holistic approach to sustainable transformations, by providing advice, assessment and strategy development to mitigate risks and support the transformation. Further information is available at [www.fishlistic.com](http://www.fishlistic.com)



Jenna Bowyer



Sarah Irvine



## Peruvian anchoveta fishery improvement project

**The consumer market is demanding the highest level of sustainable seafood. Our customers are the producers of this seafood and in turn we supply our customers with the nutritional feed solutions to grow the fish.**

We can only develop sustainable nutritional solutions if we are a part of a responsible and continuously improving supply chain. As a minimum, we require our suppliers of ingredients to demonstrate responsible production practices. For fishmeal and fish oils in aquaculture feeds specifically, there is clear market demand for those ingredients to be defined as “sustainable” through meeting the full requirements of the FAO Code of Conduct for Responsible Fisheries.

“The Peruvian FIP is one example of how Skretting has shown true leadership towards the sustainability of the aquaculture industry. Their vision for pursuing responsibly sourced ingredients has given us the assurance to meet our customers demand for sustainable seafood via our Aquaculture Stewardship Council certified products,” says Linda Sams, Head of Sustainability at Tassal Group Limited, Australia’s largest farmed salmon producer.



**“Maintaining our ASC certification is important to our business and having a future, predictable supply of ASC compliant feed allows us to farm our salmon responsibly according to World best practice standards”**  
**Linda Sams, Head of Sustainability at Tassal Group Limited**

In order to fulfil this demand, which we see only growing in the future; we look for potential fisheries that can give a predictable supply of sustainable marine ingredients. It is our judgment that the Peruvian anchoveta fishery is well positioned to meet such a demand. Today, we have a growing demand from our customers to demonstrate this through delivering feed compliant with the ASC standards.

In a proactive move towards securing our supply of ASC compliant marine ingredients, Skretting and Cargill Aqua Nutrition joined together and approached members of the Peruvian fishmeal and fish oil industry to discuss the implementation of a fishery improvement project (FIP). In cooperation with the Peruvian National Fishery Organisation (Sociedad Nacional De Pesquería), there is now agreement to establish the FIP in Peru, with final action plans currently being established.

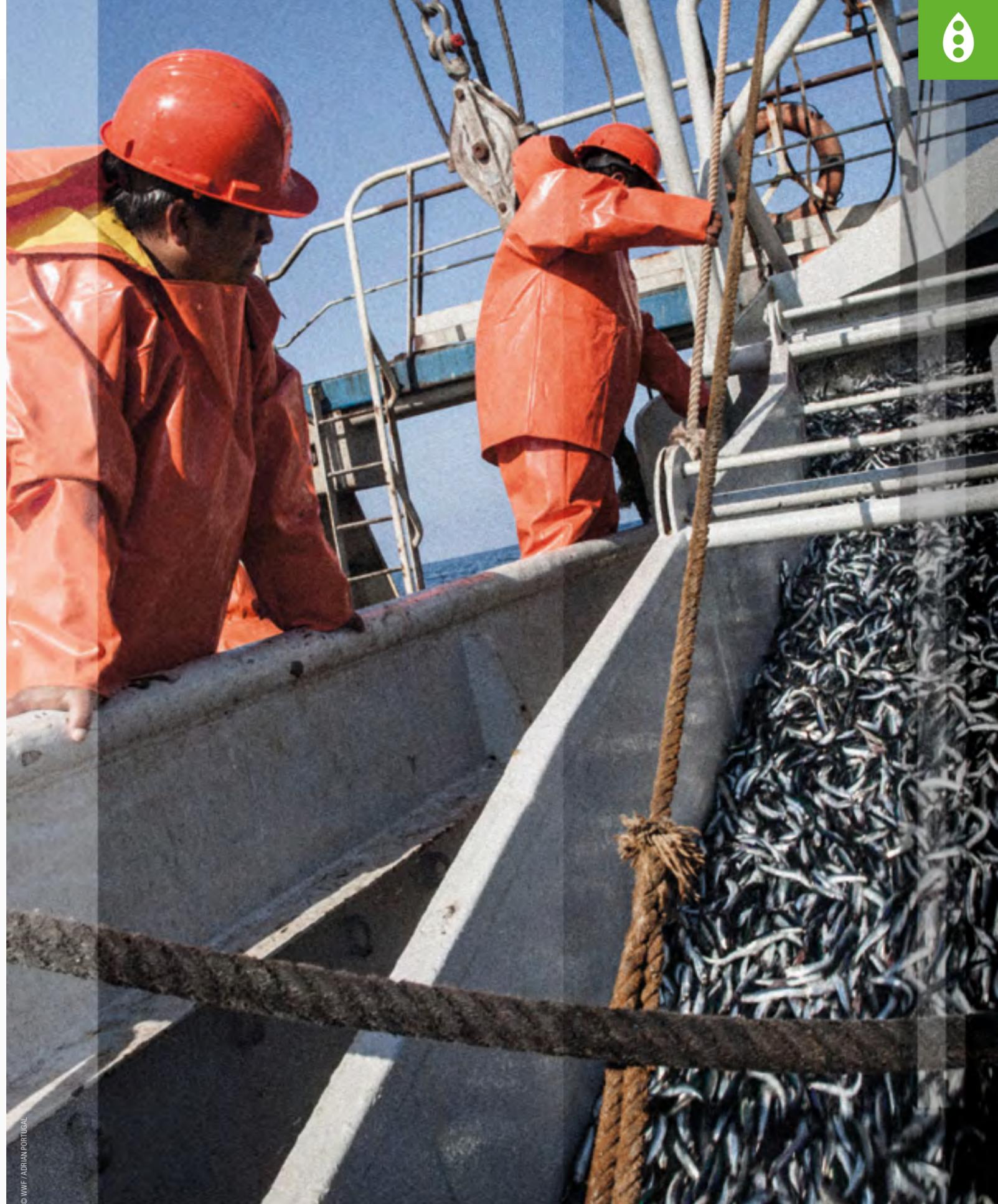
This FIP aims to strengthen research, management and sustainability of the Central and Northern Peruvian anchovy fishery. The project will include a benchmark against the Marine Stewardship Council (MSC) fisheries standard. The project will follow the guidelines for a comprehensive FIP set out by the Conservation Alliance for Sustainable Solutions to ensure its credibility and seek maximum collaboration with all stakeholders.

Jo-anne McCrea, WWF Australia, highlights that with over 30% of fish stocks overfished globally, and global demand forecast to rise 29% by 2022, there is a clear need for a significant shift towards sustainable fisheries management. “However, the responsibility of this improvement should not rest on the fishing sector alone – buyers and end markets of fish products must demand sustainable products and be prepared to invest in the improvement programme to deliver changes on the water,” she says.

“Skretting, together with industry peer Cargill have shown such leadership in their sector by working collaboratively with the Peruvian anchovy fishery to secure an agreement by the industry to start on a fishery improvement project in 2017. WWF looks forward to Skretting and Cargill using its market power to ensure that the credibility of the FIP by requiring that it delivers comprehensive and credible on-the-ground improvements to the equivalent of MSC standards.



**“Skretting builds upon work previously established via WWF Australia’s corporate partnerships with Tassal, Australia’s largest aquaculture company; Blackmores, Australia’s leading fish oil supplement brand; and Coles Supermarkets, who as a retailer, buys and sells aquaculture seafood. It highlights the power of collaboration between stakeholders to take steps towards securing the future of the environment,” says McCrea.**





Jerome Zodins



**“We have a big responsibility to ensure the ingredients we purchase for our feeds are produced in a responsible and sustainable manner”**  
Jerome Zodins, Procurement Manager at Skretting Australia

## Sourcing sustainable soy

**The United States, Brazil and Argentina account for approximately 80% of the world’s soya bean production. Soybeans are widely used in many foods and feed products.**

Skretting Australia purchases its soy protein concentrate from Brazil. Although, soy protein concentrate only makes up a small percentage of our total feed ingredient inclusion (~2–3%), it is a very functional ingredient and there is potential for higher inclusions in many of our feed formulations.

Since January 2016, Skretting Australia has taken the decision to purchase all of its soy protein concentrate from responsible and sustainable production, requiring our suppliers to deliver batches of soy that are approved and certified according to the ProTerra standard.

The ProTerra standard was developed in 2006 by Swiss Coop and the World Wildlife Fund (WWF). ProTerra standard addresses the biggest challenges in the production of plant proteins related to environmental protection. It has a special focus on biodiversity and areas with high conservation value, legal use of land and water, and respect for the needs and rights of small farmers and indigenous peoples, as well as protection of workers’ health and rights. The requirement in the ProTerra standard is that soy cannot come from agricultural land that has been cleared for cultivation after 2009.

“The main concern with utilising soy in our feeds is the connection of the cultivation of Brazilian soy with the deforestation of tropical rainforests. Therefore, it is crucial that we are being a responsible company and able to secure access to sustainable soy from Brazil both today and into the future,” says Trygve Berg Lea, Sustainability Manager for Skretting.

**“As a key link within the food production value chain between raw material suppliers and consumer demand, we have a big responsibility to ensure the ingredients we purchase for our feeds are produced in a responsible and sustainable manner,” says Jerome Zodins, Procurement Manager at Skretting Australia.**

“We also produce feed for Aquaculture Stewardship Council certified customers, so our decision to purchase ProTerra-certified soy supports our customers by also meeting the purchasing criteria for soy as outlined in the standard.”

Skretting is a member of the ProTerra Foundation. It is our responsibility to be transparent about our use of soy and provide support towards stopping deforestation in the soy supply chain by procuring certified sustainable soy.



# Operations

We strive to minimise the negative impacts of our direct operations and create valuable employment opportunities for the communities in which we operate. These efforts directly address three UN SDGS.



Stig Støver

## Reducing our water footprint

**Water is a precious resource in Australia where droughts are common and predicted to increase in the future. Since water is a key component of our core business process of converting raw materials into fish feed pellets we must use it efficiently.**

In 2016, the team at Skretting Australia embarked on a water reduction project, led by Manufacturing Manager, Stig Støver. There were three reduction areas identified for improvement.

We reduced the volume of water used in the extrusion process (addition of steam and water) through the modification of our process settings and the formulation of feeds. These changes improved energy usage (less water added, less water to dry out), and in many incidents even improved the product quality.

We activated a partially operational water recycling system, which made a profound impact. Up until now, the water was used and then discharged, but now it is recycled and hence we have reduced the need to purchase municipal water.

We optimised the volume of water required to irrigate our bio-filter functionality (a dry filter medium will not remove odour). As such we also reduced the cost of buying water, but more importantly it reduced the amount of water sent to trade waste.

**“These three improvements accounted for a substantial water reduction (20% less water used per tonne of feed compared to 2015) and has had a profound impact on the environmental footprint of our operations in Cambridge. I am very satisfied with the outcomes, considering there were huge growth demands in production, the real impact was even greater than our ambitions,” says Støver.**

“The coming year will be about consolidating the results, but the focus will continue within operations and for capital investment design activities to continue to identify and further increase our operational efficiencies.”



Productive employment and decent work are key elements to achieving sustainable economic growth and poverty reduction. At Skretting we provide employees with a safe and secure working environment through the implementation of HSE Standards as well as our Code of Ethics which clearly outlines our zero tolerance approach to discrimination and child labour. We also go beyond these fundamental basics by creating opportunities for our employees to develop their professional skills and engage in meaningful work through the provision of training and career development. These initiatives not only add value to lives of our employees and the communities in which we operate, but it also helps to improve the productivity of our operations.



Our production plants consume natural resources including water and non-renewable fuels in the process of making feeds. We also produce some undesirable wastes and emissions. To ensure our operations remain sustainable we must manage these inputs and outputs in a responsible manner. Skretting and Nutreco has implemented a rigorous system of data collection and reporting for 4 environmental KPIs – energy, GHG, water and waste. This data is used to inform management on the performance of our operating sites which enables them to identify opportunities for sustainable production and consumption. This creates shared value by improving the efficiency of our operations as well as reducing our environmental footprint.



The United Nations Paris Agreement on climate change entered into force in 2016. This sets a global action plan to avoid dangerous climate change by limiting global warming to below 2°C. To meet this ambitious target governments, business and society need to work together to reduce emissions. Skretting is working to reduce our own footprint through improvements to energy efficiency and shifting to energy sources that are less emissions intensive. This adds value to our bottom line by reducing costs whilst also contributing to the fight against climate change. For the emissions that are unavoidable we purchase offsets which support the development of sustainable energy systems.



## Reducing our environmental footprint

Hilde Roald



While the level of reporting – giving an accurate global evaluation of all operations – is new, the very practical endeavour of locally monitoring and reporting the sustainability of Skretting’s processes has been an important aspect of most OpCos’ work for many years, explains Hilde Roald, Production Director within the Global Salmon & Fish Feed Southern Europe Business Unit.

**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.**

In 2016, Skretting continued its robust evaluations of our environmental impact alongside the progressive implementation of practical measures to reduce those effects. With the introduction of Sustainability Dashboards with year-to-date data, we are now able to individually calculate the footprints of every single operation in our business and to set specific targets with regards to reducing energy use,

carbon emissions, waste generation and water use. We are also able to identify ways in which to make the Skretting workplace safer and healthier for all of our employees, thereby reducing lost time incidents (LTIs),” says Harm Teunissen, HSE Director of Nutreco.

As a member of the Global Production Team, Stig Støver Skretting Australia’s Manufacturing Manager, says, “The ability to benchmark our operational KPIs with other Skretting companies provides us with significant value because we can learn from each other and discuss practical ways in which we can reduce our operational impacts like energy or water use and we can set realistic and progressive targets.

“This year at Skretting Australia, we focused on identifying improvements and efficiencies in water, waste and energy. Operationally, our primary challenges is, and forever will be, time and priority. This year we experienced a great leap in

demand (up 23%), which caused the focus to be on setting the operations up to the task (resources, training, planning) and we also started a major capital investment project.”

Støver continues, “Within the increased demand, we improved total water efficiency by 20% and total electric energy efficiency by 7%. The majority of additional feed volume was high energy diets, which typically require high thermal energy (water, gas for heating steam and drying) in the production processes, so to also have a small improvement in total thermal energy efficiency is an impressive result.”

He also highlights a key message from Roald that ensures this focus is maintained: “Efficiency is essentially the key aim for all operations; and when you focus on efficiency you are also focusing on sustainability.”



## Building our safety culture for a sustainable workplace



Terry McDonnell

Terry McDonnell, Skretting Australia's HR and Health & Safety Manager, says, "It is important that we have a strong safety culture and our organisation is now at the level of maturity where we can say that safety is how we do business."

**Ensuring that our workplace is a safe environment in which to conduct our operations has always been a top priority for Skretting. Indeed it is in everyone's best interest to ensure that health and safety is second nature across the company as it provides the platform for sustainable growth.**

There are many benefits to a safe workplace. By having the right people, the right equipment and the right systems in place we can ensure our employees are capable, motivated, healthy and safe and that means everyone goes home safely and comes back to work the next day – and that is sustainable.

Stephen Rossow has worked at Skretting Australia for the past six years as a Mechanical Maintenance Officer and has been part of the Work Health and Safety Committee for the last two years.

"I have seen the changes made by the company towards safety through the WHS team, such as implementing and knowing that safety is number one, from everything from our homes to our work. Nothing is ever over looked when it comes to the safety of employees," says Rossow.

The ways in which we make our workplace safer and healthier for all employees is a daily practice. The number of hazards controlled, workplace inspections conducted and the number of near miss incidents and injuries are recorded to ensure that we are making the right decisions and the company is heading in the right direction.

In the coming year, to further safeguard our workplace, we have embarked on two key projects. The first is a company-wide program to significantly improve the safety performance around the use of forklifts, and the second is a dust minimisation project to identify where and what dust is being generated and to review our processes to eliminate the root cause and establish routines to maintain standards.



Stephen Rossow

McDonnell says, "The key to engaging employees to take safety seriously is through positive communication. Having regular constructive health and safety discussions that encourages a 'speak up culture' where unsafe acts can be interrupted in a respectful and honest manner.

"I am passionate about keeping our employees safe, so having a strategy that is focused on identifying hazards and managing the risks so that everyone remains inside the safety circle and goes home safely is important to me. I know that our approach to safety is the right one and this was cemented for me in 2016 where our company received a Tasmanian Employer of Choice award. Personally, this was a real highlight as it was our values, culture and approach to health, safety and wellbeing that were the key elements for achieving this award," says McDonnell.



# Commitment

At Skretting we believe a sustainable future is not viable without the involvement of motivated people. Therefore we are actively engaged with internal and external stakeholders to achieve common sustainability goals. This addresses two UN SDGs.



Majority of population growth over the coming decades is predicted to occur in emerging markets. In order for them to achieve the productivity gains required to feed these additional mouths, they need access to the technology and know how that has enabled farmers in the developed world to produce more from less. Skretting and Nutreco is helping to bridge this gap by investing in community development projects focused on capacity building for small scale farmers in emerging markets. This offers opportunities for shared value by improving the profitability and productivity of the farmers, whilst creating future opportunities for Skretting and Nutreco in these markets.



Given the scale of the sustainability challenges facing the world, it is impossible to achieve progress in isolation. This can only be achieved if partnerships are formed between all segments of society including business, government, NGOs and communities. Collaboration is part of our company values at Skretting and Nutreco and this can be seen through our long term involvement in external partnerships and multistakeholder platforms. This includes our biannual Agri and AquaVision conferences as well as the Pinicoy Project in Chile, the Seafood Business Ocean Stewardship, and our community development projects in Nigeria and Indonesia.



Melissa Abbott

## Connecting our employees to sustainability

**True integration of sustainability into a company such that the business model creates substantial social and environmental value in addition to financial returns is rare.**

**In other words, by the very act of succeeding as a business, a company creates greater value for society and the environment, and most importantly the customer and ultimately the end consumer.**

Our company is built on working with stakeholders to develop a sustainable aquaculture industry. On that basis, we must act in a way that protects our company and industry reputation now and into the future. If our employees understand what sustainability means and can apply a sustainability mindset, then we can be more innovative by constantly reviewing our processes to find new solutions and efficiencies that can contribute to the sustainability of our industry.

Jenna Bowyer, Sustainability Officer at Skretting Australia, says "Until this year, sustainability was never truly defined at Skretting Australia. It made sense that our employees associated sustainability with sourcing responsible raw materials, or a customer's sustainability certification requirements, or energy or waste reduction measures, but our definition of the true concept of sustainability, and connecting our employees to that concept, was missing.

So here-in laid the challenge, and our opportunity, to begin the integration of sustainability into our business model and to make it real for our employees.

In 2016, the company held department specific sustainability workshops. Melissa Abbott, Skretting Australia's Financial Controller & Supply Chain Manager says, "I was very pleased with how the workshops confirmed that sustainability has a wider definition in the company than just about 'being green'. Going forward, it provides me with a framework to engage my team and to have them take a more active role in contributing to the three key areas of sustainability, people, planet and profit."

Abbott goes on to say, "I believe we succeeded in actioning sustainability into the company by empowering people to draw on their personal drive and motivation for sustainability. This translated into a huge number of suggested ideas and improvements at our sustainability workshops. These ideas were converted into annual projects for our employees for the coming year, which I believe is really cementing sustainability into our annual business strategy."



# Continuously developing our people

The collective experience, knowledge and talents of our people helps Skretting to achieve considerable success while also progressing the aquaculture industry on a global scale. Our aim is to continue to build the capabilities and culture required to be a successful and sustainable company and we strive to be the company where the best people in the industry want to work.



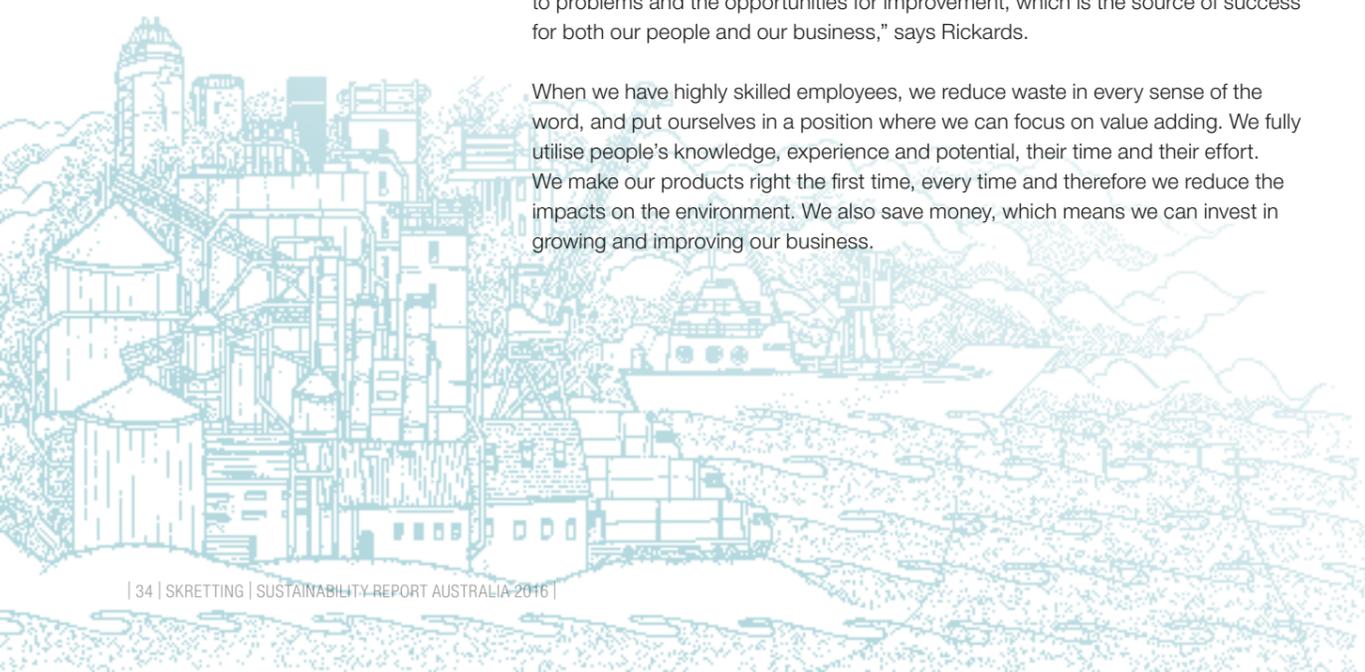
"I know that through employee and organisational development we can work towards building and maintaining a very sustainable and successful business."

Anna Rickards, Skretting Australia's Organisational Development Manager

It is important that employees are continuously developed and are capable of doing their jobs. Anna Rickards, Skretting Australia's Organisational Development Manager, says "I believe that continuous improvement and learning is critical to any successful business. Our business is our people; without their development we are not taking care of our business.

"We are committed to being an employer of choice, we want to attract and keep the best people that we possibly can and this is one way of achieving this. I also believe that when we are truly capable that is the point where we see the solutions to problems and the opportunities for improvement, which is the source of success for both our people and our business," says Rickards.

When we have highly skilled employees, we reduce waste in every sense of the word, and put ourselves in a position where we can focus on value adding. We fully utilise people's knowledge, experience and potential, their time and their effort. We make our products right the first time, every time and therefore we reduce the impacts on the environment. We also save money, which means we can invest in growing and improving our business.



To ensure we are continuously developing our employees we provide development opportunities under three focus areas; Management and Leadership, Technical and Professional and Operational Excellence. "We will continue to build the competence and confidence of our people managers and leaders through internal and external programmes and ensuring that our frontline operators continue to achieve competence in all aspects of operations. We are also looking long-term and will begin to create development plans for all of our employees" says Rickards.

Gene Medicott, Process Manager at Skretting Australia was earmarked by Rickards to undertake a Diploma in Leadership and Management. "I found the course highly beneficial. After the course, I have noticed an improvement in my approach to managing not only my team members, but also myself, particularly around time management, prioritising work load and recognising the benefits of a healthy work-life balance," says Medicott.

Feedback is received through engagement surveys and the subsequent follow up discussions. A variety of regular one-on-one, team and toolbox meetings are held, which are designed to enhance communication, support and identify employee needs. At the business level, our long-term strategic plans are coordinated with the organisational development model so that we can take account of our future needs and our employee's needs.

Rickards goes on to say "I am passionate about people experiencing satisfaction and fulfilment in their work. I believe that one of the best ways to achieve our potential which leads to satisfaction, is through development opportunities and that is why we make this a high priority. When we can provide 'real' learning and development opportunities for our people, that is when we see our culture strengthen and our performance lift.



Colleen Filippa



Australian company Fifteen Trees coordinates the planting of trees through local conservation groups such as Landcare Tasmania to help reduce the impact of CO2 emissions on the environment. In 2016, a total of 1,325 Skretting-sponsored trees were planted in several locations around Tasmania to reduce the previous year's business travel carbon emissions.

## WALKING THE TALK supporting our environment

Skretting has been supporting Tasmania's environment through Fifteen Trees for a few years now and there have been many direct and indirect benefits of this collaboration.

Colleen Filippa, Director of Fifteen Trees, says, "Skretting is Fifteen Trees' biggest supporter in Tasmania. As such, I have been able to offer trees to groups who would normally have to spend months raising money to purchase trees for their projects. Some of the groups we have given trees to would not have even begun a planting project in 2016 if not for Skretting's support."

Filippa goes on to say, "The planting of trees benefits communities in a number of ways. The trees themselves help restore the natural environment in reserves and parkland. The trees are well suited to the area in which they are planted. The benefits of planting local species include: lower maintenance and inputs (including water), suitable habitat

for local wildlife, improved biodiversity (e.g. increased bird life), higher survival rates, improved water quality, improved erosion control and habitat for insect and bird predators.

"Tree planting and restoration work also brings people together. There is a real sense of community when people gather to plant. They often also have a meal together and from that many networks and friendships are developed."

Claire Boost, Project coordinator at Okines Community Garden, says, "We have recently decided to extend our revegetation work to create a corridor of native vegetation which runs behind our garden site and flows down to the wetland and the beach. We greatly appreciate Skretting Australia's donation of trees to undertake this project."

We will continue to support the Tasmanian environment and community through our collaboration with Fifteen Trees.

## AQUAVISION Sanford's experience

For 20 years, Nutreco and Skretting have hosted the AquaVision conference. This multi-stakeholder platform brings together board-level executives, influential public officials and key members of the NGO community to discuss issues facing the aquaculture feed-to-food value chain now and in the future.



Solveig van Nes



Tommy Foggo

The 11th edition of AquaVision was attended by more than 375 delegates from 35 countries. The theme was 'Meeting tomorrow today' with speakers covering a wide variety of topics, including sea lice, fishmeal, human nutrition and population growth. The global megatrend of antimicrobial resistance (AMR) was highlighted by Nutreco's CEO Knut Nesse, as one of the most pressing issues facing the aquaculture industry, with calls for industry to work together to remedy the situation.

Keynote speaker Lord Sebastian Coe urged the industry to increase awareness among young people in order to achieve its goal of feeding a growing population. "The message needs to be clear, explain what you're doing and why; explain what you can achieve; pose a challenge and place yourself as the solution," he advised delegates.

Tommy Foggo, Salmon & Aquaculture Development Manager for Sanford, attended the event as part of a Skretting Australia hosted tour. "For me a key highlight from AquaVision 2016 was the presentation by Solveig Van Nes from Bellona. It was extremely

insightful to hear about aquaculture from an independent non-profit organisation's perspective.

Foggo goes on to say, "Overall, the event has such high quality speakers it is impossible not to pick up on valuable ideas that you can take back to your own operations, particularly on new technologies and fish husbandry practices that can all flow through to more cost-efficient operations at Sanford's sites here in New Zealand.

"It's a great conference where you can catch up with the most amazing leaders and like-minded individuals that are all striving to take our industry forward globally," says Foggo.

This year Skretting hosted a special delegation of NZ dignitaries at the conference. New Zealand's Kaikoura MP, Stuart Smith reflected on the visit saying, "It gave me the chance to see first-hand how the Norwegians not only farm salmon, but encourage and manage regional development with respect to the aquaculture industry. Our aquaculture industry, like Norway's, has a very bright future indeed".





## About this Report

This year, we have taken a different approach to reporting by aligning with the United Nations Sustainable Development Goals (SDGs). These goals define global sustainability priorities and seek to mobilise efforts around a common set of goals and targets. In other words, it is the materiality assessment of global society.

Skretting is the aquaculture feed business of Nutreco. As such, our approach to sustainability and basic policies and procedures are the same as for Nutreco. The Sustainability Report of Nutreco can be found here [www.nutreco.com](http://www.nutreco.com). Skretting's report is aligned with the Nutreco Sustainability Report, but in some areas we highlight information of particular interest for the aquaculture supply chain.



## THE GLOBAL GOALS For Sustainable Development



## Strategy

### Our Mission: Feeding the Future

Our ambition is to contribute to meeting the rising food needs in a sustainable manner. We aim to be the global leader in providing innovative and sustainable nutritional solutions that best support the performance of fish and shrimp. To achieve this goal, we will work towards enabling farmers to double production whilst halving the environmental impact.

### Our approach - Nuterra Programme

In 2016, Nuterra – Nutreco's global sustainability programme – was launched to all Skretting companies. It provides the vision and actions needed to ensure we will live up to our responsibilities and ambitions. The programme is made up of three parts: Nuterra Roadmap, Nuterra Standard and Nuterra Product Assessment.

In 2017, Skretting Australia will begin launching the Nuterra programme to its stakeholders, beginning with the employees.

## Key stakeholders



### Customers

Our customers are companies that produce aquaculture species typically for human consumption as seafood. Our company provides technical assistance through our service team and customer events. Information is made available via our website, customer magazine and we facilitate engagement through global forums, meetings and site visits.



### Employees

Our people are important to us. Our company has many programs to ensure personal development opportunities and a safe and healthy work environment. Feedback from staff is obtained through annual climate surveys and annual performance reviews. We have an active social club, regular business updates and our internal magazine provides a monthly update of events.



### Nutreco

As a division of Nutreco, and a company within the Skretting Group, we contribute to annual performance objectives and targets. We engage with Nutreco through our intranet and internal newsletter and relevant updates are often communicated through press releases. The major forum for engaging about sustainability issues is the biennial AquaVision conference.



### 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 biennial AquaVision conference.



### Industry associations and researchers

Being the link between raw material supply and customer demand, we are engaged with stakeholders as industry advisors or participants in applied research often through active research project collaborations or networks.



### Government and regulators

We engage with the government through our association with peak industry bodies. Our employees also give advice to government on a variety of issues such as aquaculture feed legislation, issues relating to food safety and general information on the aquaculture industry.



### Local community

We aim to be a positive member of the community. Our engagement strategy is focused on supporting and attending local community events and initiatives that are in alignment with our company's business strategy.

### Sustainability Governance

Sustainability is the responsibility of Nutreco's CEO, who is directly supported in this role by the Nutreco Sustainability Platform (NSP). The NSP team is led by the Corporate Sustainability Director in Nutreco, with support from four other members who represent the different divisions of the Nutreco, among them Skretting.

NSP meets monthly and is tasked with designing and executing the sustainability strategy. Working together with other departments, this strategy translates into actions that are implemented throughout the global business. For more details see Nutreco sustainability report.

At Skretting Australia, members of the Management Team represent all aspects of the company and are responsible for the implementation of the local sustainability strategy and program within their department. Skretting Australia also has an employee dedicated to coordinating the sustainability plan.

### Ethics and Legal Compliance

The company uses both internal resources and external consultants to ensure full compliance with all legislation governing our activities.

All employees agree to abide by Nutreco's Code of Ethics during the employee induction process.

To read Nutreco's code of ethics visit the Nutreco website - About Us - Code of Ethics  
<http://www.nutreco.com/en/Corporate/Corporate-Governance/>

### 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 the group and which are the same as for Nutreco.



# Organisational profile

## Name

Gibson's Limited trading as Skretting Australia

## Operations

Feeds for aquaculture species

## Head Office and factory location

Cambridge, Tasmania, Australia

## Owner

Part of Nutreco, privately-owned by SHV Holdings

## Markets and customers

Australia and New Zealand.

## Feed sold per species type:

- 64% Atlantic salmon
- 24% king salmon
- 2% trout
- 7% barramundi
- 1% abalone
- 1% yellowtail kingfish

## Scale of operation

>90,000t of feed produced

## Workforce

76 employees (62 full-time, 3 part-time, 11 temporary)  
60 men, 16 women  
63% production and logistics  
28% sales and administration  
9% management  
Management team (5 men, 2 women)

## Materiality

The materiality issues for Skretting are the same as for Nutreco. For more details on materiality issues please refer to the Nutreco Sustainability Report.

## Material issues we regard particular important for the aquaculture and aquafeed sector are:

- Marine raw materials and overfishing
- Slavery and human rights (in the seafood sector)
- Antibiotic use
- Raw material scarcity
- Precision farming and efficiency
- Animal health
- Biodiversity
- Climate change

## Memberships

- Australian Human Resources Institute
- Australian Institute of Management
- Australian Renderers Association
- Chartered Accountants Australia and New Zealand
- Continuous Improvement Specialists
- Experimental Aquaculture Facility Advisory Committee
- National Aquaculture Council
- New Zealand Salmon Farmers Association
- Stockfeed Manufacturer's Association

## Report period

1 January to 31 December 2016

## Last report

Skretting Australia Annual Sustainability Report 2015 (published April 2016).

Available at <http://www.skretting.com/en-AU/sustainability/reports/>

# 2016 highlights

● Complete ○ In progress

STRATEGIC PRIORITIES	STATUS	UPDATE OF PROGRESS TOWARDS TARGETS
<b>Nutritional Solutions</b>		
Promotion of the environmental benefit of Skretting feed concepts	●	Our customer magazine, Nexus is our primary avenue for communicating information to our customers on our products, specifically edition #24 in 2016. In addition, our sales and marketing team attend regular technical meetings with our customers to discuss our product range. Our growth modelling tool AquaSim is used frequently with our key customers to model fish performance to identify efficiencies
Develop a biosecurity protocol for employees visiting customer farms and processing facilities	●	An internal protocol was developed for employees to ensure proper hygienic practices and compliance to our customer's biosecurity policies and state regulations to minimise any biosecurity risks of farm visitation.
Undertake fish health R&D specific to our customer requirements	●	A controlled feed trial was conducted at the Experimental Aquaculture Facility from April to August 2016, where new high temperature feed solutions were tested to improve the growth and support large Atlantic salmon during summer temperatures.
<b>Ingredients</b>		
Identify options for further improving Australian based raw materials suitable for aquafeeds	○	Two Australian-based raw material development projects (land-animal and vegetable-based) were identified and project plans were scoped. We had engagement with key suppliers of these raw materials during the year and the projects will be followed up on and executed in 2017.
Broaden our knowledge of operational conditions for our marine raw material supplies	○	The consultant group, FishListic, was engaged to help us gain a deeper understanding of our marine raw material supply chain. This project will continue for the following two years, focusing on further developing our responsible marine raw material sourcing strategy and improving our market position and minimising our brand risk.
Purchase soy recognised by a third-party certification program	●	All soy purchased in 2016 was from the third-party certification program, ProTerra. All batches of soy delivered come with a verified certificate.
Continued engagement with stakeholders on the development of the ASC feed standard	○	Any developments to the ASC Feed Standard were communicated to our relevant customers as required, to inform them of any changes that may benefit or impact their ASC certification.
Incorporate sustainability criteria as part of regular audits of our local suppliers in 2016	●	All 5 key sustainability criteria (i.e. compliance with legal and regulations, child labour, health and safety, environment, plus marine products) were included into our local supplier audit documentation.

# 2016 highlights

● Complete
 ○ In progress

STRATEGIC PRIORITIES	STATUS	UPDATE OF PROGRESS TOWARDS TARGETS
<b>Operations</b>		
Achieve an environmental certification for our operations (ISO14000)	○	Certification to ISO14001 was not achieved in 2016. Instead, we decided to have a third-party conduct a gap analysis against the standard to help in our preparations for the full audit. This target will be achieved in 2017.
Build a strong foundation for developing people capability through enhancing our Competency gap analysis	○	Organisation changes were made to support our employees competencies, including a management role re-structure. An organisation development plan was developed and will be continuously updated to enhance and capture competency gaps, development needs and priorities for training and development.
<b>Commitment</b>		
Initiate structured engagement meetings with our key stakeholders	○	We are in the process of understanding as a company who are key stakeholders, what is important to them and how do we/should we be engaging with them. In 2016, we developed an informative flyer that was distributed to the community directly surrounding our manufacturing operations in Tasmania. This target is to be a step-wise one and in 2017 our aim is to develop a stakeholder engagement strategy.

# Nutritional solutions

## Life Cycle Assessment

The average carbon footprint of our feeds:

Feed production = 0.05 kg CO<sub>2</sub>e/kg

Feed ingredients = 6.65 kg CO<sub>2</sub>e/kg

Total carbon footprint feed = 6.70 kg CO<sub>2</sub>e/kg

## Research collaborations

**Fisheries Research and Development Corporation**  
**South Australian Research and Development Institute**  
**Department of Primary Industries New South Wales**

- Kingfish for Profit (KP4) project: Growing a profitable, innovative, collaborative Yellowtail Kingfish industry: bringing 'white' fish to the market

**Institute of Marine and Antarctic Studies, Experimental Aquaculture Facility**

- Research on local issues for large Atlantic salmon - Amoebic gill disease and high water temperature

**University of Tasmania**

- Feed development projects addressing production issues in Atlantic salmon and rainbow trout
- PhD sponsorship - Pigmentation physiology in Atlantic salmon

**Cawthron Institute New Zealand**

- Improving King (Chinook) salmon feed efficiency for industry growth

**Massey University, New Zealand**

**Ghent University, Belgium**

- Research on spinal malformations in King salmon
- PhD sponsorship - Spinal deformity mechanisms in King salmon
- Collaboration with industry fish quality improvement program, focused on reducing skeletal malformations in King salmon

**Nelson Marlborough Institute of Technology**

- Feed performance documentation for King salmon
- Sponsorship - Faecal chemical and physical properties and benthic amelioration

**Collaboration with Brightwater Consulting Ltd**

- Investigating gut health in King salmon

**Customer feed trials (on-farm)**

- Feed development addressing the cost of production in Atlantic salmon, King salmon, rainbow trout, barramundi and yellowtail kingfish

# Ingredients

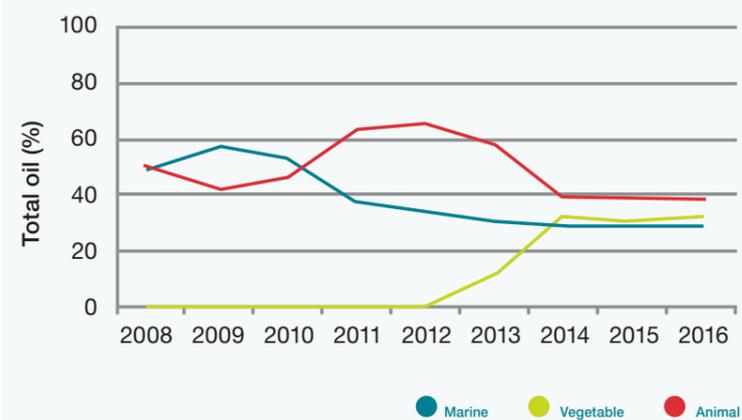
## Inclusion of feed ingredients

	(%)
<b>Marine Proteins</b>	
Fish meal (reduction fisheries)	6.5
Fish meal (by-products)	6.4
<b>Land-animal Proteins</b>	
Poultry meal	17.6
Feather meal	8.9
Meat meal	3.7
Blood meal	4.4
<b>Vegetable Proteins</b>	
Lupin	3.9
Wheat gluten	2.5
Soy protein concentrate	2.0
<b>Marine oils</b>	
Fish oil	6.2
<b>Land-animal oils</b>	
Poultry oil	9.7
<b>Vegetable oils</b>	
Canola oil	7.0
<b>Carbohydrate</b>	
Wheat	13.0
Faba bean	2.3
Technical and others	5.9
<b>Other</b>	
	100.00

## Historic usage of proteins in feeds



## Historic usage of oils in feeds



## Procurement practices/supplier screening

Skretting and parent company Nutreco focus on supplier engagement through the group-wide

Supplier Code of Conduct <http://www.nutreco.com/en/our-way/Sustainability/supplier-code-of-conduct/>

The Supplier Code of Conduct is applicable to all our suppliers and provides clear guidelines for how we expect them to act in the areas of Integrity and Business Conduct, Human Rights, and the Environment. We wish to use our influence to encourage suppliers to adhere to the Supplier Code of Conduct and to request their suppliers to do the same, supporting us in making a positive contribution to using sustainable raw materials.

## Local procurement

- 73% raw materials sourced locally
- 27% raw materials imported

## Certified materials

### Fish meal

- 55.7% IFFO RS
- 0% MSC
- 44.3% None

### Fish oil

- 62.2% IFFO RS
- 1.8% MSC
- 36% None

### Soy

- 100% Proterra

## Compliant materials

### Fish meal

- 68% ASC compliant

### Fish oil

- 28% ASC compliant

## Supplier code of conduct

Mandatory for all suppliers to sign after 1/1/2015

## Marine biodiversity

According to our criteria for marine products from fish processing must not come from threatened species. Suppliers shall not process species or by-products from species that are classified as “Critically Endangered” or “Endangered” in the IUCN Red List. Species that are listed as “Vulnerable” are not eligible for use as by-product, unless for fisheries from a discrete sub-population assessed to be responsibly managed. Regarding marine ingredients processed from whole fish, stricter requirements apply regarding fishery management.

# Operations

## Species origin and conservation status

Reduction fisheries					
Fishery location	Species	Latin Name	Fish meal (%)	Fish oil (%)	Meets ASC criteria
Peru	Anchovy	<i>Engraulis ringens</i>	55.74%	62.21%	No*
India	Sardine	<i>Sardinella longiceps</i>		15.09%	No
Ecuador	Bullet tuna	<i>Auxis rochei</i>		1.15%	No
	Mackerel	<i>Scomber japonicus</i>		4.04%	No
	Mackerel scad	<i>Decapterus macrosoma</i>		0.58%	No
China	Japanese anchovy	<i>Engraulis japonicus</i>		14.94%	No
			<b>55.7%</b>	<b>98.1%</b>	

\*Peruvian anchovy was ASC compliant from September 2016

Trimming/by-products					
Fishery location	Species	Latin Name	Fish meal (%)	Fish oil (%)	Meets ASC criteria
Samoa	Albacore tuna	<i>Thunnus alalunga</i>	2.14%		Yes
	Skipjack tuna	<i>Katsuwonus pelamis</i>	4.88%		Yes
	Yellowfin tuna	<i>Thunnus albacares</i>	0.67%		Yes
Thailand	Skipjack tuna	<i>Katsuwonus pelamis</i>	15.16%		Yes
	Yellowfin tuna	<i>Thunnus albacares</i>	1.48%		Yes
Ecuador	Skipjack tuna	<i>Katsuwonus pelamis</i>	14.69%		Yes
	Yellowfin tuna	<i>Thunnus albacares</i>	5.23%		Yes
New Zealand	Barracouta	<i>Thyrsites atun</i>		0.03%	Yes
	Blue whiting	<i>Micromesistius australis pallidus</i>		0.12%	Yes
	Hake	<i>Merluccius australis;</i>		0.00%	Yes
	Hoki	<i>Macruronus novaezelandiae</i>		1.62%	Yes
	Jack mackerel	<i>Tracherus murphyi</i>		0.02%	Yes
	Javelin fish	<i>Lepidorhynchus denticulatus</i>		0.07%	Yes
	Ling	<i>Genypterus blacodes</i>		0.01%	Yes
	Rattail	<i>family Macrouridae</i>		0.06%	Yes
	Spiny dogfish	<i>Squalus acanthias</i>		0.02%	Yes
	Other			0.04%	Yes
				<b>44.3%</b>	<b>1.9%</b>

## Energy

267.5 kwh/t of feed produced  
2.6% less than 2015

## Water

0.46 m3/t of feed produced  
20% less than 2015  
100% from municipal water supplies

## Emissions

47.9kg CO2e/t of feed produced  
16.5% less than 2015

## Waste

2.25kg/t of feed produced  
11.6% less than 2015

## Waste type, disposal

78% of waste is recycled/reused;  
22% is general/controlled burial

Total waste type breakdown:

- General: 35%
- Cardboard/paper: 5%
- Plastic: 22%
- Wood: 31%
- Organic: 6%
- Metal: 1%
- E-waste: 0%

## Water discharge

Trade waste volume 15.9ML  
3% less than 2015

## Environmental incidents

Odour: 4  
Noise: 2  
Potential discharge to water: 5  
Dust: 1

## Employee injury rate

Lost time injury: 3

## Employee training hours

>1000 hours

## Employee performance reviews

100% of employees

## Food safety incidents

0

## Certification and % of production volume certified

- ISO 9001 (100%)
- HACCP (100%)
- Global GAP CFM (100%)
- FeedSafe (100%)

# Commitment

## Sponsorships/donations

We sponsored, donated and attended a range of community events, functions and conferences. These include but are not limited to:

- Variety 4WD charity event
- Strahan Beach to Bay Fun Run
- Cradle to Coast NRM for kids
- Cancer Council - daffodil day
- Speak up stay chatty
- Child Poverty Group New Zealand
- Deaf Cricket Australia
- Great lakes anglers club
- Strahan Picnic
- Australian Farmers
- New Zealand Aquaculture Conference
- Fish in Schools program – New Zealand

We also donate feed to educational organisations such as schools, universities and trade training centres, etc. These include but are not limited to:

- Huon Trade Training Initiative

# Future goals

## NUTRITIONAL SOLUTIONS

- Continue the validation and documentation of our products through our R&D program and facilities
- Continued engagement and investment in collaborative R&D on developing species on mainland Australia

## INGREDIENTS

- Assess all our raw material ingredient suppliers against a socially and environmentally responsible risk assessment
- Audit all our land-animal protein and oil raw material suppliers against our sustainability criteria
- Participate in FIP project for Peruvian anchoveta to secure an ASC compliant source of marine raw material

## OPERATIONS

- Implement a forklift project to support a 25% reduction in forklift related incidents
- Map the locations and quantity of outbound logistic movements within the external supply chain (controlled and non-controlled)
- Achieve an environmental certification for our operations (ISO14001) (continuation from 2016)
- Increase relative recycling volume by 5%

## COMMITMENT

- Develop a stakeholder engagement strategy to guide our business management strategy
- Organise our biennial AquaScience event as part of our engagement strategy for our customers

