



thrive™



**Cargill Aqua  
Nutrition  
Sustainability  
Report**

**2017**

**Preview**



PRESIDENT'S LETTER

# Healthy Seafood for Future Generations

We deliver on our commitment to widen our reporting and build transparency and trust across our value chain.

Since Cargill acquired EWOS in 2015, we have worked purposefully to broaden the scope of our sustainability reporting. I am proud to look back at 2017 and be able to say that we now report on all 17 of Cargill Aqua Nutrition's dedicated feed mill facilities across 12 countries. This covers about 80% of Cargill's aquafeed production footprint – the remainder coming from multi-purpose mills. After more than a decade of reporting on the sustainability of our salmon feed, we now address feed for shrimp, tilapia and over 30 other species, supporting our customers with sustainability insights and addressing impacts across the value chain.

In 2017 we reached an important milestone in our sourcing policy as nearly all of our 700 raw material suppliers signed the Cargill Aqua Nutrition Supplier Code of Conduct. The Code lays out our expectations of suppliers with respect to key aspects of environmental and social impacts and responsibilities of their business. Human rights throughout our supply chain are particularly important and we engage with our suppliers to ensure they share our focus and perspective. In Thailand our membership in the Seafood Task Force is helping to address the specific concerns in local fisheries.

In addition to increasing efficiencies and driving sustainability through our supply chains, I will say that managing risk is a key success factor for Cargill Aqua Nutrition, and one of the most exciting elements of being part of Cargill.

This year's sustainability report once again follows the value chain; addressing better seafood, better workplace, better operations and better supply chain. It will set a baseline for future sustainability targets, but we can already see that our suppliers are increasing their sustainability commitments, with 29 fisheries currently holding MSC certifications and 24 more working to achieve this (45% of the fisheries we used). Our safety record continues to improve and our actions to ensure safety are now influencing customers, who increasingly look to us for leadership in this respect.

With our continued focus on waste, especially plastic, I am also pleased to report that we are recycling about 70% of our waste, a number we seek to increase. Whilst our overall waste production is relatively small, we are keen to play our part. Looking downstream, our customer focus has led to an expansion of our functional feed portfolio globally. Improved salmon feeds are helping customers to meet health challenges,

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and the concept of functional feeds is rapidly gaining support in shrimp farming. In 2017, 13% of our total feed sales supported fish health, enabling farmers to reduce reliance on medications, including antibiotics, and maintain the health and welfare of their stocks.

Cargill is working to nourish the world in a safe, responsible and sustainable way. Cargill Aqua Nutrition is focused on the supply of “healthy seafood for future generations”. This is an ambitious vision and we cannot achieve it alone. Only through collaborations can we understand and work to solve the global food supply challenges. We continue to partner with stakeholders throughout the value chain, such as Seafood Task Force, the Global Salmon Initiative, Seafood Business for Ocean Stewardship, WWF and others, and we are committed to working to support the global United Nations sustainable development goals.

Our ambition is to lead a global transformation towards sustainable seafood production and a healthy ocean.

A handwritten signature in dark ink, reading "Einar Wathne". The signature is fluid and cursive.

**Einar Wathne**  
President  
Cargill Aqua Nutrition

**MORE**  
sustainable  
growth

## MORE facilities

2017 sees the expansion of our sustainability report from our salmon feed facilities to all of our dedicated aqua feed facilities and products.

## MORE species

The 2017 report is our first comprehensive sustainability report covering salmon, shrimp, tilapia and other species.

## MORE transparency

With broader coverage comes increased supply chain transparency, underlying Cargill's commitment to lead in sustainable supply chains globally.

## MORE trust

Sustainability insights are crucial to inspire change, establish best practices and, ultimately, for the aquaculture industry to earn the trust of consumers globally.

# Shared challenges

## Population growth

### THE GLOBAL POPULATION IS GROWING

World population growth is forecast to continue until 2050, reaching 9-10 billion people. The strongest growth is expected in Asia and Africa, and two out of three people will live in cities globally.

## Healthy and sustainable food

### DEMAND FOR HEALTHY, SUSTAINABLE FOOD IS RISING

Food production must increase to feed the growing population and those currently under-nourished. Food systems must at the same time use resources more efficiently to stay within planetary boundaries and meet consumer values.

## Sustainable development

### TECHNOLOGY ACCELERATES CHANGE

We can now capture, store and analyze more data than ever before. Along with sensor technologies and machine learning, this capability will help smarter food production, increasing resource efficiency and enabling transparency.

## Aquaculture is part of the solution

### Aquaculture is the fastest growing protein sector

Globally the growth rate has exceeded 6% CAGR since 2005, but local growth can be much greater. The largest expansion in production has been in Asia, as farming practices have moved towards more intensive systems.

### Feed resource efficiencies are generally high in aquaculture

Most seafood species farmed are very efficient converters of feed to food. This means more seafood can be produced with the same feed resources and with a smaller carbon footprint than livestock species.

### Further improvements in efficiencies can be made

FAO estimates that over 400 species of animals are farmed in aquaculture systems globally – compared to five major livestock species. With more knowledge about the different species, we can develop better farming practices and feeds to reduce nutrient loss and waste in the future.

### Aquaculture feeds use a wide variety of ingredients

As aquaculture has developed, by-products of food and biofuel production have supplemented commodity crops in the feeds. Novel raw materials are being developed to create protein, energy and micro-nutrient supplies for feeds - and to make aquaculture products even healthier.

### Supplies of raw materials must be sustainable

Whilst the aquaculture industry has reduced its reliance on fishmeal and oil, many forage fisheries have improved their management and are seen increasingly as sustainable. The focus now includes terrestrial resources; to develop and demonstrate sustainable production of raw materials on land, through controls of land use change and improved farming and processing systems.

### The right feed helps to keep farmed species healthy

Health is the biggest challenge to the sustainable development of global aquaculture. Farmers are increasingly looking to integrated management systems for fish health, where feed is a key component.

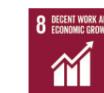
## We support the UN Sustainable Development Goals

The UN Sustainable Development Goals (SDGs) represent a global partnership for development. As a major feed producer and contributor to food production – with operations worldwide – we are positioned to impact positively on several of the SDGs.



### Zero hunger

We help to produce more nutritious food around the world.



### Decent work and economic growth

We empower and protect our employees and support local communities wherever we operate.



### Industry, innovation and infrastructure

We foster innovation and bring knowledge to bear in seafood production worldwide.



### Responsible consumption and production

We work on raw materials and feed processes to make the most use from our resources to support more sustainable and even healthier seafood.



### Climate action

We continuously explore ways to reduce the footprint of our operations, our feed and the seafood we help produce.



### Life below water

We reduce our dependence on marine raw materials and increase resource efficiency to reduce the impact of aquaculture on global water systems.



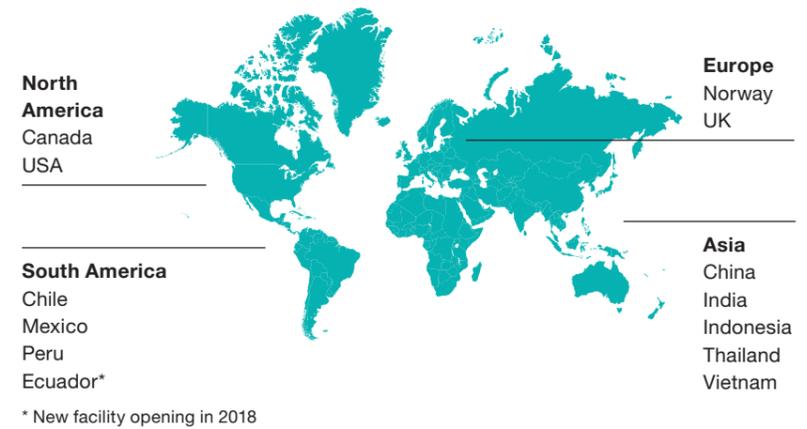
### Partnerships for the goals

We partner with a range of stakeholders to drive sustainable best practices in aquaculture.

OUR APPROACH AND IMPACT

# Better practices and satisfied stakeholders

We bring innovative feed and nutrition solutions to customers in leading markets around the world. Most of our feed is for salmonids, shrimp and tilapia, but we supply feed for more than 30 species globally.



We leverage our core capabilities and sustainable practices to create value around the world

**OUR FIVE CORE CAPABILITIES REFLECT WHAT WE DO BEST:**

**Trading and Risk Management**  
Leveraging our insights to capture value for our customers

**Sustainable Supply Chains**  
Meeting the needs of both today and tomorrow to nourish a growing global population

**Digitalization and Analytics**  
Harnessing new technologies and big data to deliver powerful insights

**Market Insights and Innovation**  
Anticipating the future needs of the market and consumers and transforming our business to meet them

**Thought Leadership and Stakeholder Engagement**  
Driving the conversation on issues key to consumers in order to prompt bold actions

## Better Seafood

Our nutritionists work to optimize the diets we sell, providing the nutrients required by the fish for healthy, vigorous growth, balanced to reduce waste. We also provide a range of functional feeds to help the fish face environmental and health challenges in the farming environment.

**30**

Over **30 species** were fed 1,750,000 tonnes of feed from our facilities. One-eighth of that product was functional feeds which promoted animal health.

**17**

This feed was produced in **17 dedicated aqua feed facilities** in 12 countries and other Cargill feed facilities in an additional 8 countries.

## Customers and Consumers

We have improved nutrient resource efficiencies and developed functional feeds. This has reduced the impact of waste and disease on seafood producers. By controlling the nutrients fed to the fish, we support the delivery of safe, healthy and delicious seafood to consumers worldwide.



## Better Workplace

Cargill is committed to safety. From constructing new facilities to the daily running of our business, we put safety before profits. Across our operations we run regular training and awareness programs and develop a culture of safety for everyday life, which has inspired our suppliers and our customers.

**70**

Across our 33 feed mills and offices, **70% of our sites were incident free.**

**0.15**

Our **serious incident frequency rate** was 0.15 per 200,000 hours worked and our reportable injury frequency rate was 0.57.

## Employees

Everyone goes home safely. That is our goal. Our safety culture has spread across our company, from the factory floor to the commute home – for both employees and contractors. Incident rates are above our ambitious targets and are we already taking actions to correct this.



## Better Operations

Our operations affect global and local communities. We are working to better assess our raw materials and to minimize our process energy use in order to reduce greenhouse gas emissions. Other emissions and effluents from factories are controlled to reduce local impacts.

**65**

Manufacturing the feed produced an average of **65kg CO<sub>2</sub>eq/tonne** (Scope 1&2). We recycle 70% of the waste associated with the feed production.

**700**

In 2017, all of our more than **700 suppliers** signed our **Supplier Code of Conduct** or provided evidence that they adhere to the same principles.

## Communities

We strive to be a good neighbor, not just a compliant one. This involves minimizing any negative impacts in the proximity of our operations, while engaging with local communities to support their economic development, improve education and conserve resources.



## Better Supply Chains

Raw materials count for more than 85% of our environmental footprint. We work with our suppliers to address the challenges, focusing particularly on marine ingredients, soy and oil palm. More broadly, we are developing novel raw materials and new tools that enable us to widen our raw materials basket.

**30%**

Nearly 30% of the **raw materials** we used to make feeds were **by-products** from agricultural, industrial or food processes.

**29**

29 of the 120 **fisheries** we source from globally have Marine Stewardship Council (MSC) certification. An additional 24 are working towards this.

## Suppliers

Engagement with suppliers drives our access to sustainable raw materials and our Supplier Code of Conduct lays out our expectations. Fisheries have joined improvement programs and soy processors are working with their suppliers on certification schemes. We are engaging on multiple levels to grow our feed production sustainably.



ABOUT US

**Cargill Aqua Nutrition is a world leader in aquaculture feed and nutrition. To deliver on our promise of healthy seafood for future generations, we commit to support the sustainable growth of the global aquaculture industry by creating better operations in a better workplace with better supply chains.**



**FULL 2017 REPORT**

The full Sustainability Report 2017 will be published at the end of April 2018.

[www.cargill.com/animal-nutrition/aquaculture](http://www.cargill.com/animal-nutrition/aquaculture)



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