Sustainability report

Responsible aquaculture for a better future

CERMAQ


1 NO POVERTY
2 ZERO HUNGER
3 GOOD HEALTH AND WELL-BEING
4 QUALITY EDUCATION
5 GENDER EQUALITY
6 CLEAN WATER AND SANITATION
7 AFFORDABLE AND CLEAN ENERGY
8 DECENT WORK AND ECONOMIC GROWTH
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
10 REDUCED INEQUALITIES
11 SUSTAINABLE CITIES AND COMMUNITIES
12 RESPONSIBLE CONSUMPTION AND PRODUCTION
13 CLIMATE ACTION
14 LIFE BELOW WATER
15 LIFE ON LAND
16 PEACE, JUSTICE AND STRONG INSTITUTIONS
17 PARTNERSHIPS FOR THE GOALS
SUSTAINABLE DEVELOPMENT GOALS

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Sustainability is in our nature

To meet the goal of limiting global temperature rise to 1.5°C, we must change our diet towards plant-based food and sea-food. To do this, we must farm more food in the ocean.

This shift follows the clear recommendations from the High-Level Panel for Sustainable Ocean Economy and is widely recognised as needed to meet the Sustainable Development Goals.

More than 25 % of the world's carbon emissions come from food production. We are proud to report that farmed salmon has one of the lowest carbon-footprints of any farmed protein. Even so, we constantly seek ways to improve our sustainability and lower our carbon footprint in all parts of our operations.

Producing seafood is just one part of the global solution. We know that farmed salmon alone will not feed the world - but replacing some of the red meat in our diets with salmon is positive for both the planet and for human health. Knowledge and technology from salmon farming can also be valuable for production of other seafood in other regions.

> *Growing awareness of the footprint of the food we eat is essential to planet health and to human health.*

At Cermaq, we work in partnership with others in our value chain to find sustainable and innovative solutions.

All stakeholders who use the ocean must share the goal of preserving and protecting it. As salmon farmers, we are directly impacted by climate changes already taking place in the ocean. Ecosystem integrity and access to marine resources are necessary for us to grow our salmon sustainably, and for our industry to continue providing the world with healthy seafood.

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Healthy and nutritious food

- Product quality
- Food safety
- Feed ingredients

Thriving oceans

- Biodiversity
- Biosecurity
- Blue economy

People Leadership

- Safety & workplace
- Community relations
- Human rights

Responsible production

- Fish health & welfare
- Certification
- Beyond compliance
- Value chain approach

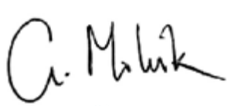
Climate action

- Adaptation
- Emissions
- Innovation

From the 17 UN Sustainable Development Goals (SDGs), we have identified the following SDGs, where we believe we can truly make a difference: SDG 2 Zero hunger, SDG 8 Decent work and economic growth, SDG 12 Responsible consumption, SDG 13 Climate action, and SDG 14 Life below water. For each of these, we have defined our focus areas, our focus areas, as seen in the illustration above.

In the following pages, you will find more details about our commitment to sustainability and our overall performance and operations. We also highlight trends we have observed, and how these may further support our efforts.

In the end, it is all about sustainability and how we together can support the internationally shared goals to cap rising global temperature at 1.5°C, and feed a growing global population with nutritious, healthy and sustainable food. Our complete Report on Sustainability meets the Global Reporting Initiative (GRI) requirements for a core report and has been assured by our external auditors. The report is available as a downloadable pdf file on our website at www.cermaq.com.



Sincerely,
Geir Molvik
CEO

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High quality food

A high-quality salmon has a high nutrient content, is rich in Omega-3 fatty acids EPA and DHA, has a high healthy fat content, a firm texture, and a bright deep orange colour. At Cermaq, our definition of a high quality salmon also requires that it has been raised sustainably.

The quality of life of the salmon also has a significant impact on product quality. Good quality salmon starts with the genetics of the brood stock salmon and the quality of the fish eggs. From that point until harvest, ensuring fish health and welfare are both fundamental for product quality and we do everything possible to avoid stressing the fish. The high-value feed we give our salmon throughout their lives provide them an optimal nutrient balance and that is reflected in the high quality and health benefits of the end product on a customer's plate. The highest possible level of food safety is guaranteed at each stage of our operations through both our internal processes and third-party certifications.

Each of our salmon comes complete with a curriculum vitae containing comprehensive information about the fish. All fully traceable.

Changing our consumption pattern is something everyone can do, and we can do it fast. The power of consumer choice is enormous and when it comes to choosing food, the origin of the product and the way it has been produced has become increasingly more important to consumers. Ensuring transparency in our value chain will allow us to leverage the power of this trend to positively affect consumer preference toward sustainably raised salmon.

The origins of our salmon – documented by blockchain

In cooperation with one of Cermaq's customers, Labeyrie, and IBM Food Trust, we have used

What comes with the protein on your plate?

Excellent source of marine omega 3

Promotes brain health

Preserves normal vision

Reduces risk of cardiovascular diseases

Good source of vitamins A, D and B12

Provides complete proteins and the nine essential amino acids

We focus on product quality through our entire value chain. How the salmon is farmed has a direct impact on the product quality and food safety is guaranteed through our wide-ranging procedures. Certifications, such as ASC, is a promise to our customers.

Kristin Hurum, Quality Director Cermaq Norway

IBM cloud blockchain technology to ensure key information is recorded and conveyed from the hatchery the way to consumers' plates.

By scanning the QR code with a mobile device consumers can view in a dedicated app all available information (from egg to plate) about the salmon they are buying.

This is only the beginning. Blockchain technology will be one of the key instruments used in future to guarantee product quality to consumers.

Read more specifics in our GRI report

- Our materiality analyses is the basis for identifying the topics on which to report. Product quality is at the centre of this analyses.

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The footprint of farming

All food production creates a footprint, often measured as the environmental impact – such as CO_2 equivalent emissions, arable land used, freshwater use or waste product produced.

However, we can also measure this footprint in terms of beneficial effects such as productive workplaces, taxes paid from production, human health impact from the food produced, and more. The footprint of food production is a balance of positive and negative impacts. Aquaculture is strongly weighted toward the positive side and we aim to improve this even further.

Farm impact on ecosystems

Farming salmon has a small CO_2 footprint compared to the farming of land animals. Despite the large number of salmon in a salmon farm the ecosystem footprint is limited. The farm's impact on the seabed is monitored regularly, covering both the area underneath the site and any impacted area surrounding the site. New fish cannot be transferred to the pens unless the benthic impact from any previous production cycle has been neutralised. To ensure this we fallow the sites, which is the practice of keeping a farming area empty until it has returned to its un-impacted state. These changes happen much more quickly in an ocean environment compared to an acre on land.

Workplaces

Most Cermaq employees live and work in rural areas along the coasts of Norway, Chile and Canada where the natural coastal water conditions for salmon

> **Employing so many people and impacting the lives of so many families carries great responsibility. Our employees are our most important resource, and it is through people we produce both financial and sustainability results.**
>
> Paula Hojas, HR Director, Cermaq Chile

are the best. Salmon farming offers a wide range of job opportunities in rural areas along these coasts. Cermaq has many talented and dedicated employees and we believe that, as often as possible, decisions that impact our fish health and welfare should be made by those closest to the fish. For Cermaq, competence is a common denominator for all areas in our operations. We take pride in our expertise, professionalism, strong partnerships, and commitment to responsible and sustainable food production.

We are encouraged by the many young people wanting to work in aquaculture and take part in the journey of growing healthy, sustainable food for people all over the world.

People always come first

No job is so important or so urgent that it cannot be done safely. We work together to make sure that we all go home to our families safely at the end of every workday. This is the basis for all our health and safety procedures. In Cermaq's Global Safety Idea Contest this year, we invited employees to put forward their proposals on how to improve safety at their workplaces. The engagement from our teams was fantastic, and contributed a number of great ideas that are being included in our operating procedures.

What we see from the OHS initiatives submitted for this competition is that our safety culture runs deep through our organisation. A strong safety culture not only keeps our people safe but enhances the efficiency of our operations.

Peter Harper, Finance Director, Cermaq Canada

Read more specifics in our GRI report

- We employ 3700 people, of which 75% are in Chile, 8% in Canada, and 17% in Norway.
- People always come first; a safe workplace is essential for OHS
- We have a low level of absentees across all regions with a company-wide average of 2.6 %
- We report company taxes paid in each country
- Our recycling of materials is increasing and in 2019 we recycled more than 90% of input plastics
- Our sites are fallowed after harvesting to allow for any seabed impacts to be reversed

Creating shared value

As we raise our salmon in the oceans above the Arctic Circle, in remote Patagonia and on the wild West Coast of Canada, we are very aware that we are using a shared resource. We acknowledge this and recognize that operating where we do carries enormous responsibility and must be done in a respectful way.

Shared value is created when both social and business issues are addressed, connecting a company's success with social progress. This includes balancing all needs, including the traditional uses of indigenous populations, commercial fisheries, recreation and tourism by looking for shared value.

Engaging with communities, indigenous groups, stakeholders and government is part of the path forward for salmon farming.

To Cermaq, examples of shared value are projects that align with our values and priorities, including those that support the United Nations' SDGs such as improving ocean health, improving local opportunities and economic development, and building strong communities. Partnering with our local communities on habitat restoration, beach cleanup, and supporting ocean health in our regional waterways are some examples of finding shared value.

The signing of the historic Broughton Archipelago Letter of Understanding

In 2019, the Government of British Columbia and the Governments of three Nations – the 'Namgis Nation, the Kwikwasut'inuxw Haxwa'mis Nation and the Mamalilikulla Nation - agreed to form a ground-breaking roundtable process which would formally recognize the traditional territories of

> I would like for all of us to look at this as an opportunity to create new relationships, strengthen existing ones, and support each other as we move forward down the shared path of supporting wild salmon, sustainable farming of our oceans and economic growth.
>
> - David Kiemele, Managing Director Cermaq Canada

these Nations. The roundtable provided a forum and process allowing for government-to-government negotiations and communications regarding salmon farming operation in the traditional territory of these three Nations.

Cermaq and Mowi were both invited to participate in the process, as both companies have operations in the Broughton Archipelago.

The historic Letter of Understanding that resulted from this process recognizes the rights and titles of the three Nations, while also providing a transition framework and map forward for aquaculture operation in this region. This allows for greater predictability for salmon farming in the region for the coming years. The Broughton Letter of Understanding team and process was awarded the Premier's Award for Partnerships for 2019.

It is also worth noting that in Canada, over 70% of Cermaq's operations are under agreement with local First Nations.

Read more specifics in our GRI report

- Working together with local communities is of key importance to Cermaq. Read more examples

Fish welfare is at our core

As science learns more and more about fish, we gain new understanding of their behaviour and their natural and social needs. As fish welfare is increasingly understood, it has become a key issue on the priority agenda for industry, regulatory and governmental authorities, NGOs and people.

In 2019, we developed and operationalized the "FishWell" report, which outlines a new system that introduces a broad range of fish welfare indicators and metrics to our operations. This system is currently being tested in Norway, Chile and Canada before a full global rollout. At Cermaq, we have always known that good fish health is vital for our business, and with the FishWell metrics we can now use a scientific approach to monitor and measure fish welfare in both sea water and fresh water. Many of Cermaq`s employees work very close to our fish. On our ocean sites, the farm teams learn to read the behaviour of the animals they care for every day, and can tell much from observing a fish's movements in the pen.

> **Fish welfare is not only fundamental, it is essential for our economic performance. I was very pleased to see the engagement and commitment across all parts of Cermaq. We all care for the fish we raise.**
>
> - Olai Einen, Global Head of Research and Development

> *Caring deeply for animals is at the heart of every responsible fish farmer.*

The ideal situation for fish welfare is when we do not need to disturb the fish in any way, they are healthy and un-stressed and eat well – every fish in every pen.

Cermaq Academy

Every year, our Research & Development team incorporates new findings into our standards and

procedures. They meet with our key staff on sea sites, freshwater facilities and colleagues in the various support functions to teach these new lessons. We call it Cermaq Academy. This year's topic was fish welfare.

Inviting dialogue with external stakeholders (such as animal welfare NGOs) is a key part of growing and developing as an organization, and in listening respectfully to all perspectives we both develop and advance.

iFarm

To most people, all salmon look the same - but they aren't. In fact, each salmon has a unique pattern of spots on their head, similar to a fingerprint. Using this knowledge to identify each individual salmon in a pen is the ambition behind the iFarm concept.

If we can uniquely identify each salmon, it will allow us to individually monitor each salmon for health and performance - essentially, every salmon gets their own health journal - as well as providing unparalleled traceability in our value chain. This individualized farming approach further allows us to tailor our farming methods, including sorting aside only those fish requiring treatment rather than needing to treat all fish in a pen. This will dramatically reduce the need for handling, reduce the need for treatment, and improve fish health and welfare.

> **Individualised farming, which is at the heart of iFarm, truly addresses animal welfare. It will be a game changer for salmon farming as it also will address all the key challenges related to fish health, sea lice and escapes.**
>
> - Karl Fredrik Ottem, Head of iFarm project, Cermaq Norway

We do not yet have all the solutions, but development is underway and this project will continue for the next five years or more.

Read more specifics in our GRI report

- Preventive fish health is our focus, and we use vaccines when available
- We minimize handling of our fish, including when we are treating for sea lice, to keep counts below regulatory levels.
- Our goal is to have zero escapes. In 2019, despite our measures 0.03 % of our fish escaped in Chile during a storm
- On average, in 2019, 93 % of our fish in the pens survived

The best feed

As fish oil and fish meal in salmon feed have been gradually replaced with sources from agriculture, a focus on ocean sustainability must also include what happens on land.

Almost 80% of global agricultural land is used to provide feed for animals. As our global population grows, we must focus on the most efficient ways to use available feed resources.

Around 75% of global soy production is used in animal feed. While only 2% is used in salmon feed, and is certified to not be causing deforestation, the global salmon industry engaged heavily as the fires in the Amazon increased dramatically.

It takes only 1.15 kg of feed to produce 1kg of salmon. Marine ingredients make up less than 1/3 of that. A large part of the marine ingredients are sourced from secondary processes, and use inputs such as trimmings and discards from the commercial fisheries that would otherwise go to waste. The rest of the feed comes from land-based sources similar to those used in other animal feeds.

Farmed salmon is a far more efficient feed converter than most land animals.

Living in the ocean, the salmon does not spend energy on keeping warm. Another reason that farmed salmon has smaller carbon footprint is that the edible portion of the fish comprises almost 70% of its total weight. This high “recovery rate” is significantly greater than that of other farmed proteins.

At Cermaq, we constantly look for innovative sources of feed ingredients such as algae and insects. Our focus is primarily on sources that are not suited for direct human consumption so there is no competition for supply, and on sources we can use without harming global biodiversity.

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Being the most efficient feed converter, salmon is in an excellent position to make use of "novel" feed sources. Our ambition is to work together with industry to develop our feed towards sustainable and cost-effective solutions that will reduce the footprint of our production while maintaining Cermaq product performance and quality.

- Joana Silva, Global Feed and Nutrition manager

As salmon farmers, we are responsible for the sustainability in our value chain, regardless of whether we source from agricultural production or from marine resources.

Cerrado Manifesto to maintain biodiversity

The Cerrado savannah in Brazil is one of the world's most important ecosystems. It is home to 5% of the planet's biodiversity, and the birthplace of many of South America's great water systems.

Today, this savannah has lost 50% of its original area to agricultural expansion, primarily driven by expanding production of beef and soy.

The Cerrado Manifesto calls for immediate action by companies that purchase soy and meat from this threatened area. The Brazilian soy Cermaq uses is certified and not grown on deforested land. Cermaq and other salmon companies signed the Statement of Support (SoS) for the Cerrado Manifesto, sending a clear signal that deforestation is not acceptable.

Read more specifics in our GRI report

- In 2019 we used on average 1.15 kg feed to produce 1 kg salmon. Read more about feed efficiency in our salmon farming.
- A significant share of fish meal and fish oil in the feed came from discards and trimmings from other, wild-capture fisheries.

International year of the salmon

2019 was the International Year of the Salmon (IYS). Our farm-raised Atlantic salmon is the same species as the salmon in our rivers on the Atlantic coasts of North America and Europe and is a relative of the wild salmon species in the Pacific

As salmon farmers we are responsible for the impact our farming has on wild salmon, and we must co-exist harmoniously side-by-side.

We are committed to supporting wild salmon enhancement initiatives in the local communities in which we operate.

Salmon are relative newcomers to the South American coastline. In Chile, several species of salmon have been introduced and settled well in the rivers, and today the tourist industry offers the opportunity of fishing Sockeye, Chinook and Rainbow trout.

While salmon thrive in South America, there are great concerns about the sustainability of wild salmon stocks on the Pacific coast of North America, and all along the Atlantic coastlines - especially in Norway and Scotland.

In Finnmark, our good cooperation between river custodians, salmon farmers, research institutions, and local authorities drives us forward in how we manage our impact on wild salmon.

- Gunnar Gudmundsson, Regional Director Cermaq Norway

The IYS aims to raise awareness of what humans can do to better ensure that salmon and their varied habitats are conserved and restored against the backdrop of increasing environmental variability. The IYS theme of `salmon and people in a changing world' reflects collective awareness that both humans and nature must adapt to our changing environment.

Monitoring farmed salmon in the rivers

Since 2013, river custodians and salmon farmers

have cooperated on monitoring two of the salmon rivers in Finnmark, Norway - Altaelva and Repparfjordelva - to see if escaped farmed salmon enters the river.

Input from sports fishing is a key part of the monitoring. Everyone is encouraged to send scale samples to the Norwegian Institute for Nature Research for analysis.

The information from the scale samples, together with analyses of the autumn fisheries, is the basis for the calculation of the percentage of farmed salmon in the river. In 2019 the share of farmed salmon in Altaelva was 0.7% and in Repparfjordelva 0.05%.

Giving a helping hand to salmon affected by a land slide

In June of 2019, a massive landslide in Canada's Fraser River cut off millions of spawning salmon from their traditional spawning grounds. A huge response was launched to help transport the salmon above the slide, and was supported by members of the local communities, First Nations, government and private sector companies such as Cermaq.

> We were honoured to be part of such a critical and important response to help protect this wild salmon population and run. Thanks to the efforts of hundreds of people over an intensive 10-week period, hundreds of thousands of Sockeye, Chinook, Pink and Coho salmon were delivered or allowed to reach their traditional spawning grounds.
>
> - Brock Thompson, Innovation Director, Cermaq Canada

Read more specifics in our GRI report

- Our goal is to have zero escapes. In 2019, despite our measures 0.03 % of our fish escaped in Chile during a storm
- A high level of sea lice at our salmon farms may also impact wild salmon. To remove sea lice, we prioritise using non-medical treatments that are gentle to the fish
- We publicly and proactively disclose our sea lice counts on our website

Ocean health matters

The importance of the oceans rose on all agendas this year as the close relationship between overall ocean health and climate change became evident. We know that without a healthy and thriving ocean, life on land will suffer.

The ocean plays a critical role in creating oxygen and supporting many of the life forms and ecosystems on land.

The health of the ocean, the land and the climate are linked, and work to support one area will have positive impact on the others. This we know - through science, research and our own observations and learnings.

Research and science all state that we must increase food production in the ocean in order to feed our world sustainably in the coming decades.

> *The ocean can sustainably produce six times more food than it does today.*

Replacing meat consumption with plant-based foods and seafood will have an immediate impact on the climate by lowering the global carbon footprint created by food production. We can increase aquaculture production by applying existing tested technology. The world's oceans have many users but we must all be stewards to share and preserve the same waters. Unsustainable practices in one area will negatively impact us all. Working together across countries and industries, with both public and private sectors, is essential in order to see immediate, tangible and enduring results.

UN Global Compact Action Platform for Sustainable Ocean Business

Cermaq engages in several partnerships and is proud of the collective work these groups and associations deliver to help further the work required to rebuild healthy, thriving oceans.

As a founding partner of the UN Global Compact Sustainable Ocean Business Action Platform, we are

proud of the outcome from the many committed partners' shared effort in scaling impact through collaboration across sectors and geographies.

Shared understanding of ocean opportunities, and the focus on the 5 tipping points for the ocean have led to the launch of the Sustainable Ocean Principles, which allow businesses, governments and organisations to sign up and use these guidelines to shape their future strategy.

Cermaq is active in several global partnerships. We believe these are efficient in driving change with the significant force we need to meet the SDGs. As fish farmers we are directly impacted by climate change and we know we must act. Time is short.

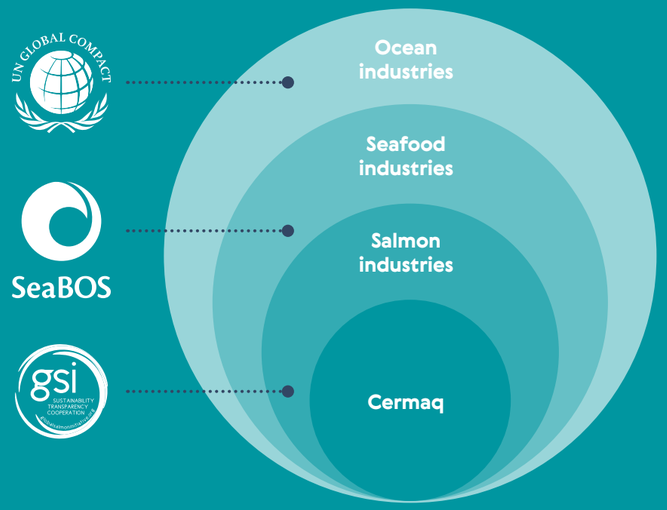
- Wenche Grønbrekk, Global Head of Risk and Sustainability.

Read more specifics in our GRI report

- We do a comprehensive risk report where risk related to ocean qualities are important
- Carbon emissions drive climate change. See our report to CDP
- From several energy reduction initiatives, we reduced energy consumption by 57 tons of carbon dioxide equivalent

Cermaq global partnerships

Cermaq's approach is to actively collaborate in global and local partnerships to find the best solutions and to scale impact. Our main global partnerships include;



UN Global Compact Action Platform for Sustainable Ocean Business:
As a founding member, we work across ocean industries to determine how they can help advance progress towards the Sustainable Development Goals (SDGs), and support the sustainable expansion of our food production, energy, raw materials and transportation capacity.

https://www.unglobalcompact.org/take-action/action-platforms/ocean

Seafood Business for Ocean Stewardship (SeaBOS):
We work with the largest seafood companies worldwide to increase transparency and traceability in the marine value chain, as well as other initiatives to meet the United Nations Sustainable Development Goals (SDGs) – and in particular Goal 14: Life Below Water.

https://seabos.org

Global Salmon Initiative (GSI):
We share best practices and drive initiatives to raise the sustainability standard of the entire global salmon farming industry, and to support the shared goal of providing a highly sustainable source of healthy protein to feed a growing global population.

https://globalsalmoninitiative.org

CERMAQ

HIGH LEVEL PANEL *for*
A SUSTAINABLE
OCEAN ECONOMY

High Level Panel for a Sustainable Ocean Economy:
As member of the Advisory Network, we contribute knowledge and experience to support the Ocean Panel's goal of generating a set of pragmatic policy, governance, technology and investment recommendations for building a sustainable ocean economy.

https://www.oceanpanel.org