

The logo for Grieg Seafood, featuring the word "Grieg" in a bold, sans-serif font above the word "Seafood" in a smaller, regular sans-serif font. A registered trademark symbol (®) is located to the right of "Seafood". The logo is contained within a white, rounded rectangular shape that has a slight wave-like bottom edge.

**Grieg**  
Seafood®

# GREEN BOND FRAMEWORK

JUNE 2020

# This is Grieg Seafood ASA

Grieg Seafood ASA is one of the world's leading salmon farmers with farms in Finnmark and Rogaland in Norway, British Columbia and Newfoundland in Canada and Shetland in the UK. Our headquarter is located in Bergen, Norway, and we have been listed on the Oslo Stock Exchange since 2007.

Towards 2025, we aim for global growth, cost leadership in each region where we operate and to become an innovation partner for selected customers. Sustainability is at the heart of all three parts of our strategy. Reducing our carbon footprint and improving fish welfare is key to getting the *license to operate* we need in our local communities to achieve our growth targets. Because good health, high survival, and low impact drive cost down, sustainability is central to achieving cost leadership. With customers increasingly focusing on the environment and health, sustainability is also key to successfully achieving a stronger presence in the market. Two of our main investments to improve our sustainable farming practices over the last years have been production of bigger smolt before we release the fish into the sea, as well as digitalization, big data analytics and artificial intelligence. Going forward, we will build on and develop these practices in particular.

The salmon farming industry is at the forefront of developing protein production in the ocean globally. Pioneering a new way to produce food, our industry must solve several challenges before we are where we want to be. We must ensure co-existence with other species, improve fish health and welfare, find sustainable feed ingredients, reduce carbon emissions and recycle more resources. Grieg Seafood is committed to play our part in solving these challenges. We aim for all farms to receive ASC certifications or, if not possible, comply with all possible aspects of the certification within 2023. For 2019, we are proud to be included on the Climate A-list by the Carbon Disclosure Project.

The global population continues to grow rapidly, and fish farming represents one way to meet the increasing demand for sustainable protein production and healthy food. There are limits to the amount of wild fish that can be sustainably harvested, and aquaculture therefore must meet the demand for more seafood in peoples' diets. Sustainable farming of fish and other marine species has an enormous potential globally. With a low carbon footprint, a low feed conversion ratio and a low land and fresh water use, farmed salmon continues to be one of the most eco-efficient forms of animal protein.

*"Farming the oceans comes with a responsibility. We are dedicated to provide more food from the sea to people around the globe while reducing our footprint and improving fish welfare. People, partnerships, technologies and innovations will help us get there. Step by step."*

## The UN Sustainable Development Goals

Grieg Seafood is committed to the UN Sustainable Development Goals (SDGs) as well as the Sustainable Ocean Principles established by the UN Global Compact. We have identified four of the SDGs as particularly important for our business, further outlined below.

### 2 ZERO HUNGER

The salmon farming industry is driving developments in global aquaculture. As a result, we are making a broader contribution to sustainable seafood production. Sustainable farming methods and practices, biological and technical innovation, research, new knowledge, and government regulations developed for the salmon farming industry can be transferred to the production of other marine species in other parts of the world. The solutions we find not only make our own operations more sustainable, but also advance the practices of fish farming industries in other countries. That way, we can truly contribute to zero hunger.

### 13 CLIMATE ACTION

Farmed fish is one of the animal proteins with the lowest carbon footprint. Still, the salmon farming industry must work to cut the carbon footprint of our salmon even further.

### 14 LIFE BELOW WATER

We work to conserve and use oceans, seas, and marine resources sustainably. We have a responsibility to protect marine biodiversity, and we strive to find new ways to reduce our environmental footprint and improve the welfare of our fish.

### 17 PARTNERSHIPS FOR THE GOALS

We cannot reach the goals we have set alone. We collaborate with authorities, research institutions, other salmon farmers, NGOs, students, suppliers and others to advance sustainable aquaculture. We share knowledge, expertise, and technology. We seek to be honest, exchange ideas, and learn from those around us.

In addition, we remain committed to another nine of the SDGs; 3 Good health and well-being, 4 Quality education, 5 Gender equality, 6 Clean water and sanitation, 8 Decent work and economic growth, 9 Industry, innovation and infrastructure, 12 Responsible consumption and production, 15 Life on Land, and 16 Peace, justice and strong institutions. These are further elaborated on in our integrated sustainability and annual report.

## Five pillars for sustainable business

Our approach to sustainable business relies on five pillars; Healthy Ocean, Sustainable Food, Profit and Innovation, People, and Local Communities. In our long-term perspective, there is no contradiction between clean seas, healthy fish and financial profit. It is our task to make these aspects go hand in hand. Our overall target goes beyond short term profitability. With our five pillars, we are committed to sustainable and long-term value creation for all our stakeholders.

For the purpose of this Green Bond Framework, we are highlighting a selected number of efforts within the Healthy Ocean and Sustainable Food pillars.

### Pillar 1: Healthy Ocean

*Farming salmon with practices that keep the fish and oceans healthy has a direct positive impact on our harvested volume, cost, quality, license to operate and employee engagement.*

#### *Fish health and welfare*

**Good fish health and welfare is both an ethical responsibility and the most important measure we can take to ensure good growth, higher harvesting quality and lower cost.**

Good fish health implies that the highest possible number of fish thrive, grow normally, and survive to the end of their life cycle. We take a preventative, systematic and long-term approach to fish health and welfare, doing what we can to ensure that our fish are robust, healthy, and happy from the very outset. We aim to select only high-quality roe with qualities that suit the conditions where the fish will be farmed, coordinated by senior management to ensure a uniform high standard. In addition, we apply different feed programs for each stage of the salmon's life cycle to optimize health and welfare.

Our smolt should be healthy, vaccinated and have verified smoltification status before transfer to sea. To prevent spread of disease we have strict controls in place for live fish transports and disinfection of boats and equipment when transferred between sites and zones. We also have regular fish health inspections and screening programs at all sites conducted by authorized fish health personnel to achieve early detection of diseases and implement early measures. In addition, we have procedures in place to avoid stressing the fish, and our harvesting procedures are in accordance with requirements from customers and regulations to prevent suffering. We have also participated in the creation of a manual on which indicators to use to assess salmon welfare, via the Fishwell project.

As we are active in several different regions, we have implemented regional fish health plans to ensure we meet the variety of challenges present at our different

locations. We focus on cooperation between our regions to learn and share best practice, and we also organize fish health and welfare training programs for all employees, with refresher courses at least every third to fifth year.

We apply Area-Based Management and collaborate with neighboring fish farmers to prevent and contain diseases. In case sea lice treatments are needed, we must find the correct balance between the welfare of our fish and the potential impact on the local environment, while also avoiding parasite resistance to existing treatments.

We continuously monitor environmental conditions that may affect the fish, such as temperature, oxygen levels, and water quality. In our freshwater facilities, we control and adjust these factors to ensure healthy growth conditions for the fish.

We do our best to avoid using antibiotics in all forms, to preserve their effectiveness and to minimize resistance against antibiotics. Our policy aims to completely avoid the use of antibiotics, and we currently only use it as a last resort, after adequate risk assessment, to treat bacterial diseases where there are no vaccines or reduced effect of vaccines. Use is subject to strict internal regulations. All use requires senior management approval, and prescriptions are signed by certified fish health personnel.

#### *Sea lice control*

**Controlling sea lice levels is one of the most important measures to protect wild salmon, as well as the health and welfare of farmed salmon. Sea lice treatments are expensive and resource intensive. We aim to keep sea lice levels low at all times.**

Our main approach to sea lice control is prevention. We aim to keep adult female sea lice levels low to achieve a low infection pressure. When the sea lice level rises and approaches legal limits, our policy is to perform continuous assessment and apply additional measures. If we need to use sea lice treatments, we favour non-chemical delousing methods, to avoid affecting the

environment and other species in the ocean. However, when selecting treatment, fish welfare and potential resistance to sea lice treatments are also considered. If, as a last resort, we need to use medical treatments, we revolve the use of various medicines to avoid resistance to the treatments. We collaborate with neighbouring fish farmers to control sea lice in the areas we operate in.

## *Escape control*

**Escaped farmed Atlantic salmon can mix genetically with wild Atlantic salmon stocks, and it is our responsibility to use farming methods that minimize farmed salmon's impact on the wild salmon population.**

We have zero tolerance for escapes from our farms in all regions and we apply high technical standards at our sites. We have implemented the technical minimum requirement given by the government, the NYTEK standard, at all facilities in Norway to avoid escapes during harsh weather. In BC, we use double nets on all pens. In addition, we use divers and/or an ROV before and after transfer or treatment of fish and we have

regular inspections of vessels, moorings, and facilities to verify compliance and additional inspections are conducted before and after harsh weather.

In Newfoundland, we will use sterile salmon which cannot genetically mix with wild salmon should they escape.

## *Limiting local emissions*

**Local emissions from salmon farming may affect the environment in the ocean under or around the pens. Local emissions can be excess feed, feces from the fish or copper from the fish net.**

In line with our precautionary approach, we aim to minimize local emissions. With the current production methods in open pens, some organic emissions must be anticipated. The impact from such emissions must be kept below limits and levels considered acceptable by national authorities. Our footprint should never be irreversible.

To avoid excess feeding, we use underwater cameras and we monitor the seabed under and around our sea farms including benthic testing during peak biomass.

Local regulations impose following periods after each generation, to ensure the environment under and around the pen can recover. If the local environment is not sufficiently restored according to independent monitoring, we must extend the following period before transferring new fish to the pens or reduce production at the site concerned.

We support copper-free antifouling solutions on our nets. Several of our sites are copper free, and for those that are not we are actively searching for relevant alternatives.

## *Interaction with wild life*

**Farms are often located in areas abundant with birdlife and marine mammals. As a responsible salmon farming company, we do what we can to avoid conflicts with wild animals.**

Where relevant, we use equipment that minimizes the risk of injury to wildlife, such as strong nets or anti-predator equipment. For example, we use protection on the pens to prevent marine mammals from injury if they come into contact with the farm, and we have bird net

covers on the pens. We are also planning to invest in more equipment that is not harmful to wild animals. Potential conflicts with wild animals are evaluated when we consider new sites.



## Pillar 2: Sustainable food

*We work to make practices more sustainable along the entire value chain. Focus areas expand from safe and healthy food, traceability and feed to carbon emissions and waste management.*

### *Sustainable feed ingredients*

**Fish feed is the most important and costly input factor in salmon farming. Sustainable sourcing has long been an important issue, and a lack of sustainably fished marine ingredients has made feed producers substitute marine fish oil and fish meal with plant-based ingredients. As the aquaculture industry continues to expand, we strive to source new feed ingredients in order to grow sustainably.**

We have focused on several supply chain risks connected to feed ingredients for several years. Overfishing can be a risk connected to marine ingredients, and deforestation can be a risk connected to some plant based ingredients. We have set specific sourcing requirements to feed suppliers on these aspects. During 2020, we will conduct a broader risk assessment of our feed ingredients, which will include assessment areas like carbon footprint, human rights and more.

From 2020, 100% of the marine ingredients in the feed we use will comply with the sustainability standard set by Marine Stewardship Council (MSC), Iceland Responsible Fisheries Management (IRFM) Certification Program, Alaska Responsible Fisheries Management Program, or the International Fishmeal and Fish Oil Organization Responsible Supply Standard (FIPs). No marine ingredients come from illegal, unreported, or unregulated fisheries. 100% of soy ingredients are conversion free and certified according to the sustainability standards Proterra or Round Table on Responsible Soy. These standards ensure that the soy we use has not contributed to deforestation. Our aim is

to have an FFDRm number below 1, implying we are a net producer of marine protein.

We are also committed to use our purchasing power to push the general soy industry in Brazil in a conversion free direction. We are a founding member of the Cerrado Funding Coalition, which aims to bring a halt to soy related deforestation in the Cerrado, and for the local soy industry to expand on already cleared agricultural land.

In our Supplier Code of Conduct, we require our suppliers to minimize their environmental impact, with a particular emphasis on the exploitation of limited resources and on deforestation. Our suppliers are expected to identify and monitor their impact and implement measures where needed.

To promote development of novel sustainable feed ingredients, such as insect meal, we are in frequent dialogue with suppliers and we cooperate with other players in the industry, such as the GSI, to encourage feed producers to increase their focus on sustainable ingredients. We are also a member of the steering committee for the development of a new global ASC standard for fish feed.

### *Reducing carbon emissions*

**Though farmed salmon has a low carbon footprint compared to other protein sources, we must reduce our carbon emissions further.**

Grieg Seafood must play our part in reducing greenhouse gas emissions in order to reach the Paris Agreement's objectives and our target is to cut greenhouse gas emissions from Scope 1, 2 and 3 by 35% by 2030, from a 2018 baseline. For 2050, the target is 75% reduction.

Our largest direct source of emissions is from the fuel that powers our boats, vehicles, and on-site electricity generators. We are testing out a variety of new technologies to reduce the carbon footprint of these sources, such as replacing the diesel engines used at sites with battery packs or hybrid solutions.

We are working to reduce our emissions, across Scope 1, 2 and 3 and we will adopt Science-Based Targets to meet the goals of the Paris Agreement.

Our main drivers of Scope 3 emissions are transport, airfreight and feed. We maintain a regular dialogue with our suppliers of feed, goods and services, and we discuss what they are doing to reduce their GHG emissions. Some of our suppliers already have their own GHG reduction targets and going forward, we will encourage others to clarify their goals.

In 2019, Grieg Seafood was given an A rating by the Carbon Disclosure Project (CDP) for our climate disclosures and actions towards a low-carbon future.

### *Climate risk*

**The effects of climate change, such as extreme weather, warmer seawater, and rising sea levels can have financial impact in the coming decades. Knowledge of the possible financial consequences of global warming, and the integration of climate risk, is an essential part of our risk management strategy.**

Climate-related risks are mapped as part of our overall risk management strategy and in accordance with the recommendations of the Task Force on Climate-Related Financial Disclosures. Our climate-related risks include the physical risks of climate change, such as disruption of operations due to extreme weather, and the impact of

the transition to a lower-carbon economy. Transition risk covers market risk, such as constraints on emissions; regulatory risks, such as imposition of carbon tax; technology risks, such as competition from land-based fish farming or lab-produced proteins; and reputational risk.

## Waste management

**Our waste should always be disposed of in compliance with prevailing regulations, and recycled whenever possible.**

We make every effort not to pollute the environment where we farm our salmon. As much waste as possible should be recycled and fed back into the circular economy. Plastic should be recycled and not end up in the ocean.

In regards to water management, most of the tanks in our fresh water facilities are Recirculating Aquaculture Systems (RAS), which recycle at least 90–97% of the water used.

Handling biological waste is another important part of our waste management procedures. Fish trimmings and dead fish from the farms are disposed of separately, and processed into fish silage. Depending on quality, it may be used for animal feed, biofuel, or fertilizer. Organic waste from our fresh water facilities are recycled and used as biofuel or fertilizer.

## Grieg Seafood and Green Bonds

Sustainability is a core part of our strategy and forms our license to operate. By setting up this Green Bond Framework, we aim to issue green bonds to further invest in, and promote, low-carbon and climate resilient development within the seafood industry.

This Green Bond Framework is aligned with the Green Bond Principles published by the International Capital Markets Association (ICMA) in 2018 and has been prepared in cooperation with DNB and Nordea.

The framework defines the assets and projects eligible for financing by Green Bonds and it also outlines the process used to evaluate, select, track, and report on such investments.



## Use of Proceeds

Net proceeds from Grieg Seafood's Green Bonds will be used to finance a portfolio of assets and projects, in whole or in part, that promote the transition towards low-carbon and climate-resilient development. Only such assets and projects that comply with the list of Green Projects below are deemed eligible to be financed with Green Bonds. Net proceeds from Green Bonds can be used for the financing of new assets and projects, as well as for refinancing purposes. New assets and projects are defined as ongoing Green Projects and those taken into operation less than 12 months prior to the issuance of a Green Bond.

For the avoidance of doubt, Green Bonds will not be used to finance investments linked to fossil energy generation, nuclear energy generation, research and/or development within weapons and defence, potentially environmentally negative resource extraction, gambling or tobacco.

## Green projects

Net proceeds from Grieg Seafood's Green Bonds will finance and refinance investments and related expenditures within the following Green Project Categories.

- Environmentally sustainable aquaculture
- Pollution prevention and control
- Water and wastewater management
- Waste management

### Environmentally sustainable aquaculture

#### *Sustainable feed*

- Procurement of feed where 100% of marine ingredients comply with the sustainability standard set by Marine Stewardship Council (MSC), or the International Fishmeal and Fish Oil Organization Responsible Supply Standard (IFFO RS) including FIPs and where 100% of soy ingredients are certified according to the sustainability standards Proterra or Round Table on Responsible Soy, using the segregation model to ensure segregation of certified and non-certified soy. Feed shall also comply with the ASC standard on fish meal and fish oil. In addition, the procurement of feed should either:
  - o support commercialization of novel fish feed ingredients with a smaller footprint, or
  - o improve fish health and welfare.Feed from Cargill Aqua Nutrition will be excluded from the use of proceeds, until the mother company Cargill Inc. have significantly reduced their soy-related deforestation risk in Brazil.
- Contribution to the Cerrado Funding Coalition.

#### *Sustainable farming*

- Construction, development, acquisition and improvements of post smolt production facilities.
- Production of sterile (triploid) salmon. Sterile salmon cannot mix genetically with wild salmon should they escape.
- Construction, development, maintenance, acquisition and improvements of fish farms certified, or in preparation to become certified, by the Aquaculture Stewardship Council (ASC) salmon standard, only using sustainable feed as defined above.
- Efforts to promote fish health and welfare, in particular to apply a preventative approach as often as possible, such as sustainable sea lice management, reduction of antibiotics use and systems for monitoring, control and analysis.
- Research and development projects aimed at better understanding and improving fish welfare.
- Efforts to restore and enhance surrounding ecosystems, such as escape prevention and systems for monitoring, control and analysis.
- Digitalizing our farming operations, by applying advanced sensors, big data, artificial intelligence and automation, which will provide better knowledge on correlation between the fish and the environment. The result is increased growth, reduced environmental impact, improved fish welfare, and lower cost.
- Construction, development, maintenance, acquisition and improvements of harvesting facilities that are certified, or in preparation to become certified, using Chain of Custody (CoC) to ensure traceability of ASC certified products.

## Pollution prevention and control

- Construction, installation, maintenance, acquisition and improvements of renewable energy installations, such as wind and solar, as well as battery packs, to power fish farms and vessels.
- Costs directly related to switching from fossil fuels to electrical power, and hybrid solutions.
- Development projects aimed at reducing the carbon footprint in Scope 3 of the GHG protocol.

## Water and wastewater management

- Construction, installation, maintenance, acquisition and upgrades to water and wastewater management systems at fresh water facilities and harvesting facilities, reducing wastewater, increasing water recycling and improving water use efficiency.

## Waste management

- Waste management solutions that enable the reduction, recycle and reuse of waste, including, but not limited to, biological waste and plastics, promoting a high recycling rate and a reduced need for virgin raw materials.





## Process for project evaluation and selection

To ensure transparency and accountability around the selection of Green Projects, Grieg Seafood has established an internal Green Bond Committee, being responsible for the evaluation and selection process. The Green Bond Committee consists of members from our Management, Technical, Sustainability and Finance teams as well as relevant farming regions, and all decisions will be made in consensus. Only such assets and projects that comply with the Green Project criteria defined in the use of proceeds section of this Green Bond Framework are eligible for Green Bond financing. The Green Bond Committee will keep a register of all Green Projects, and to ensure transparency and traceability, all decisions made by the committee will be documented and filed.

The Green Bond Committee will convene every six months or when otherwise considered necessary. For the avoidance of doubt, the Green Bond Committee holds the right to exclude any Green Project already funded by Green Bond net proceeds. If a Green Project is sold, or for other reasons loses its eligibility, funds will then follow the procedure defined in the management of proceeds section below until reallocated to other eligible Green Projects.

## Management of proceeds

Net proceeds from issued Green Bonds will be credited to a separate account and used solely for financing and refinancing of Green Projects as defined by this Green Bond Framework. As long as there are Green Bonds outstanding and the separate account has a positive balance, funds will be deducted when relevant, or at least annually, in an amount equal to all disbursements for Green Projects made during the relevant time period. Transfers from the separate account will be documented to ensure traceability of Green Bond net proceeds and to enable reporting of allocations.

The Finance department of Grieg Seafood will endeavour to ensure that the amount of Green Projects at all times exceed the total amount of Green Bonds outstanding. If an asset or project financed by Green Finance Instruments is sold, or for other reasons no longer qualify as a Green Project in accordance with this Green Finance Framework, the asset or project will when needed be replaced by other qualifying assets and projects.

Net proceeds from Green Bonds awaiting allocation to Green Projects will be managed according to the overall liquidity management policy of Grieg Seafood and may be held as cash.



# Reporting

To enable investors and other stakeholder to follow the development of Grieg Seafood’s issuance of Green Bonds and the Green Projects being funded, a Green Bond Report will be made available on our website. The Green Bond Report will include an allocation report and an impact report and be published annually as long as there are Green Bonds outstanding.

## Allocation report

The allocation report will include the following information.

- Amounts invested in each of the Green Project categories defined in this Green Bond Framework and the share of new financing versus refinancing
- Examples of Green Projects that have been funded by Green Bonds
- The nominal amount of Green Bonds outstanding
- The amount of net proceeds awaiting allocation to Green Projects

## Impact report

The impact report aims to disclose the environmental impact of the Green Projects financed under this Green Bond Framework, based on Grieg Seafood’s financing share of each project. Impact reporting will, to some extent, be aggregated and depending on data availability, calculations will be made on a best intention basis.

The impact assessment will, where applicable, be based on the metrics listed below.

Green Project category	Impact reporting metric
<i>Environmentally sustainable aquaculture</i>	Sustainable feed <ul style="list-style-type: none"> <li>- Volume of novel feed ingredients in feed purchased</li> <li>- Volume of feed ingredients that improve fish health and welfare</li> </ul> Sustainable farming <ul style="list-style-type: none"> <li>- Number of ASC certified sites financed by Green Bonds</li> <li>- Share of all farms that are ASC certified</li> <li>- Reduction in the number of fish escapes</li> <li>- Improvement in the survival rate</li> <li>- Reduction in number of sea lice treatments</li> <li>- Improvement of benthic results</li> </ul>
<i>Pollution prevention and control</i>	<ul style="list-style-type: none"> <li>- Reduction of GHG emissions</li> </ul>
<i>Water and wastewater management</i>	<ul style="list-style-type: none"> <li>- Volume of solid sludge collected and treated for re-use</li> <li>- Percentage of water recycled from fresh water facilities</li> </ul>
<i>Waste management</i>	<ul style="list-style-type: none"> <li>- Volume/quantity of waste recycled before and after new project/initiative</li> </ul>

## External review

Grieg Seafood has obtained a Second Party Opinion from Cicero Shades of Green to confirm the transparency of this Green Bond Framework and its alignment with the ICMA Green Bond Principles published in 2018. The Second Party Opinion will be made available on our website together with this Green Bond Framework.

An independent external auditor appointed by Grieg Seafood will on an annual basis verify the content of the impact report and provide a limited assurance report that an amount equal to net proceeds from issued Green Bonds has been allocated to Green Projects.