The SG-Feed – Vision and Strategy

SALMON GROUP

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Salmon Group is a network for small and medium-sized fish farmers in Norway, accounting for approximately 13% of Norway's total production volume. Our main objective is to ensure optimal operating and framework conditions, achieved through procurement agreements that provide our shareholders with economies of scale. With an annual feed consumption of over 230,000 tons, feed is our most important procurement category. To guarantee our fish receive optimal nutrition, we have developed our own feed formula, the SG-feed. We are committed to our social responsibility and sustainable resources management, aiming to support a food system aligned with the principles of the Paris Agreement and the United Nations Sustainable Development Goals.

Since 2018, following the release of the report "Sustainable Farming of Salmon and Trout – What is that?", Salmon Group has methodically improved the SG-feed based on our core principles: Fish, People, Planet. These values are deeply ingrained in our operations, especially concerning the SG-feed. Our commitment extends beyond ensuring the health and welfare of our fish; it also includes meeting the needs of individuals within our value chain and safeguarding natural ecosystems.

In salmon and trout farming, feed is a key element both financially and in terms of sustainability, with feed accounting for between 70 to 80 percent of the CO2-footprint associated with farming. This highlights the importance of our efforts to reduce the environmental impact of the SG-feed. Through continuous improvement of the SG-feed, we aim to reduce emissions and support a more sustainable aquaculture industry. Our commitment is demonstrated by initiatives such as the inclusion of microalgae and the exclusion of Brazilian soy in 2019, as well as the inclusion of krill and insect meal in 2024. Some Brazilian soy producers have made great progress since 2019. Consequently, some certified producers of Brazilian soy are now allowed in the SG-feed.

We require transparency and sharing of sustainability data throughout our supply chain. Accurate and reliable data enables fact-based decisions on raw materials, which is essential for our sustainability objectives. Furthermore, this data allows us to evaluate our environmental impact and confirm if our efforts are aligned with our goals. We thus require regular and detailed reporting from our suppliers, enabling collaboration towards a more sustainable future in the aquaculture industry.

Sustainability is more than a goal; it is an ongoing process that requires dedication, innovation, and collaboration. We will explore new methods, raw materials, and technologies to reduce environmental impact and ensure a healthier future for both fish and people. In collaboration with suppliers and partners, we will work towards achieving our sustainability goals and continually improve the SG-feed. Transparency about our progress and challenges is essential, and we will provide regular updates on the SG-feed's sustainability performance.

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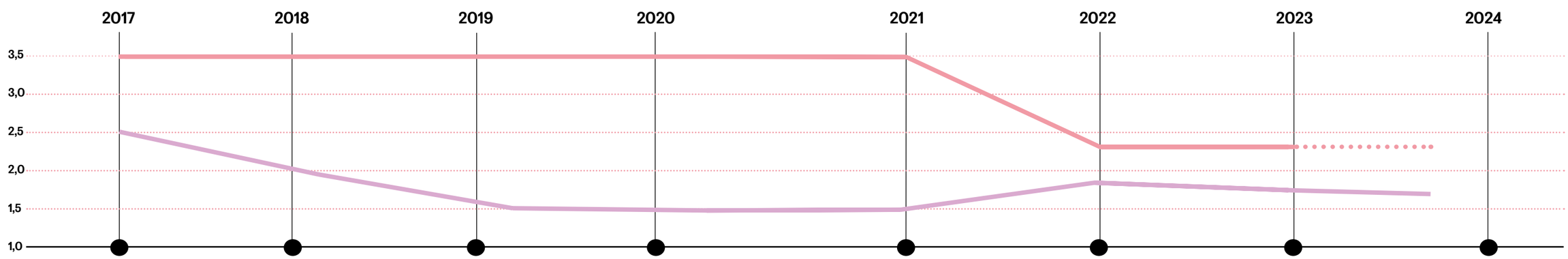


Salmon Group implements microalgae meal in the SG-feed

The report titled 'Sustainable Farming of Salmon and Trout – What is that?' was prepared and published by Salmon Group. It identifies feed as the primary contributor to the carbon footprint of the aquaculture industry.

Salmon Group excludes Brazilian soy as an ingredient as a measure to prevent deforestation.

Implementation of new requirement: 15% of Omega-3 fatty acids (EPA/DHA) in the SG-feed shall be derived from microalgae

New regulatory requirement to reduce the level of Dioxin/PCB in the feed from a maximum of 7 pg/g to 0.5 pg/g.

Implementation of new requirement: 30% of Omega-3 fatty acids (EPA/DHA) in the SG-feed shall be derived from microalgae

New regulatory requirement to reduce the level of Dioxin/PCB in the feed from a maximum of 0.5 pg/g to 0.35 pg/g.

Implementation of new requirement: 30% of the fishmeal in the SG-feed shall be derived from trimmings

Due to the war in Ukraine, the share of raw materials of Russian origin is greatly reduced. After careful consideration, ProTerra-certified soy from Brazil is reintroduced into the SG-feed.

Inclusion of soy from North America in the Salmon Group feed.

Salmon Group implements krill meal in some of the SG-feeds

Salmon Group implements insect meal in some of the SG-feeds

TRIMMINGS: Trimmings are byproducts generated from the fish processing industry that are not intended for human consumption. These include components such as fish heads, backbones, skins, and entrails. Rich in nutrients, these by-products can be processed into valuable ingredients like fishmeal and fish oil, which are subsequently utilized in salmon feed production.

BENEFITS OF TRIMMINGS IN SALMON FEED:

CIRCULAR SUSTAINABILITY: By utilizing all parts of the fish, waste is minimized and alleviates pressure on wild fish stocks.

NUTRITIOUS: Trimmings are rich in protein and omega-3 fatty acids, essential for salmon health and growth.

FISHMEAL: Fishmeal is a high-protein product derived from whole fish or fish by-products of species not primarily used for human consumption, such as blue whiting, sand eel, and anchoveta. In addition to its high protein content, fishmeal also includes omega-3 fatty acids and minerals, making it a nutritious and easily digestible feed ingredient.

DIOXINS/PCBS: Dioxins and polychlorinated biphenyls (PCBs) are environmental contaminants found in marine environments, affecting both wild-caught fatty fish and farmed fish. These pollutants accumulate in fish through their diet.

INSECT MEAL: Insect meal is derived from dried and ground insects, with black soldier fly larvae being the most prevalent source. It offers significant nutritional benefits and has a lower environmental impact compared to traditional feed ingredients. The farming of insects requires minimal land and water resources and can be sustained using organic waste and by-products. This practice supports a circular economy and provides a sustainable protein source. Additionally, insects are a common component of the diet of wild salmon and trout, making them an appropriate ingredient in their feed.

SG-Feed Key Sustainability Objectives

CO2 FOOTPRINT

We aim to further reduce our carbon footprint by choosing raw materials from suppliers and subcontractors who optimize their production processes, improve energy efficiency, and use renewable energy sources. We prioritize raw materials with the lowest CO2 footprint. *We monitor the SG-feed's CO2 footprint on a quarterly basis* and require that accurate CO2 figures for each raw material are reported to our feed producers in a timely manner. All CO2 calculations shall be based on scientific methods, preferably EU PEF. This allows us to continuously monitor and reduce our environmental impact.

FIFO/FFDR (FISH IN FISH OUT/FORAGE FISH DEPENDENCY RATIO)

Salmon, a carnivorous species, has inherit limitations digesting and utilizing plant-based raw materials. Consequently, the SG-feed contains a high proportion of marine raw materials, as we believe this is the key to optimal fish health and welfare, while also contributing to a healthy, high-quality product for consumers. To safeguard our oceans, we require all marine resources to be certified and sustainably sourced. Furthermore, the SG-recipe stipulates that at least 30 percent of all marine protein is derived from trimmings.

Furthermore, the quality and characteristics of the SG-feed must allow for efficient digestion and maximum utilization, allowing us to achieve a low feed conversion ratio (FCR). Additionally, we are considering feed strategies where we differentiate between summer and winter feed to satisfy the fish's varying requirements and to optimize our utilisation of marine raw materials throughout the year. Our objective is to attain a FFDR below 1 by maximising the use of trimmings and sustainable alternative protein sources. *FIFO will be monitored on a quarterly basis.*

EU PEF: The Product Environmental Footprint (PEF) is a methodology developed by the European Union for assessing and communicating the environmental impacts of products throughout their entire life cycle, from raw material extraction to waste management.

FIFO/FFDR: "Fish In Fish Out" and "Forage-Fish Dependency Ratio" are terms used in aquaculture to quantify the relationship between the quantity of wild fish utilized in the production of fishmeal and fish oil for fish feed, and the quantity of farmed fish produced as a result. For instance, a FIFO ratio of 1:1 signifies that every kilogram of wild fish used in feed results in one kilogram of farmed fish. A lower FIFO ratio signifies more efficient use of marine resources, contributing to sustainable aquaculture.

FEED CONVERSION RATIO (FCR): FCR is a metric that evaluates the efficiency with which fish convert feed into body mass. Specifically, it denotes the number of kilograms of feed required for the fish to gain one kilogram in weight. Several factors influence the FCR, including the size of the fish, water temperature, disease, stress, and the composition of the feed.

ASC-STANDARD: The ASC standard is a set of guidelines designed to promote responsible seafood farming practices. These standards aim to minimize the environmental and social impacts of aquaculture while ensuring the welfare of farmed fish and the communities involved in their production.

LAND USE CHANGE

We ensure that raw materials are sourced responsibly, avoiding any contribution to deforestation or the destruction of natural habitats We support sustainable agriculture that maintains and improves soil health, and promotes carbon sequestration. *We will monitor the feed's impact on land use change.*

FRESHWATER CONSUMPTION

We recognize the importance of responsible freshwater consumption and expect our suppliers to adopt water-saving technologies and processes to support us in reducing our freshwater footprint. This includes optimizing water use in production, reusing and recycling water where possible, and responsibly managing wastewater to protect freshwater sources. We support water conservation initiatives and sustainable freshwater management and will *monitor freshwater consumption per kg of feed produced*.

CIRCULAR ECONOMY

We have adopted circular economy principles for the SG-feed and have a clear expectation that our supply chain contributes to this initiative. To monitor and improve the feed's circularity, we will implement *measurements of circularity*. These measurements will focus on the following:

- **Utilization of By-Products**: Our objective is to maximize the use of fishery resources by ensuring that all by-products, including trimmings, are repurposed in ways that maximize their value.
- **Collaboration and innovation**: We explore partnerships with companies that, through innovation, develop novel ingredients that can contribute to a lower environmental footprint and the use of resources that would otherwise be wasted. We will continue to seek out innovative feed ingredients, such as insect meal, which contributes to high-quality feed while utilizing by-products from the agricultural industry.

CERTIFIED RAW MATERIAL

We adopt a risk-based approach and require that raw materials assessed as high risk be certified, where relevant certification is available, or approved by our partners, the producers of the SG-feed. We prioritise raw materials that meet stringent environmental and social standards. All raw materials and suppliers are risk-assessed according to the methodology in the ASC feed standard.

HUMAN RIGHTS

We are committed to following the UN Guiding Principles on Business and Human Rights and the ten principles of the UN Global Compact. We expect suppliers and producers throughout our supply chain to implement these principles, implement requirements in their own supply chains, ensure fair working conditions, and support the communities in which they operate. We will conduct human rights audits for raw materials and subcontractors with an elevated risk of human rights violations.

BIODIVERSITY

We will work to protect and promote biodiversity through the choices we make with the SG formula. This includes avoiding raw materials that contribute to deforestation and supporting initiatives that promote ecosystem health.

CLIMATE ADAPTATION

Development and revision of strategies to adapt to climate change, including risk assessments throughout our supply chain, is an integral part of our mission. We work towards continuous improvement of the SG-feed, and improved sustainability and climate adaptation are key elements in this effort.

By regularly identifying climate-related risks, we can create adaptation plans to effectively manage the impacts of climate changes. This involves assessing vulnerabilities such as extreme weather conditions, water supply, and raw material availability. Alongside our suppliers, we promote climate-smart agriculture and sustainable practices.

COLLABORATION AND PARTNERSHIPS

We have strengthened, and will further reinforce, the partnerships with our main suppliers to enable a sustainable supply chain and feed production innovation. We will also work with startups and projects by e.g. offering our expertise, providing volume for scale up, and providing trial opportunities. By actively participating in industry forums, we share insights and promote sustainable practices. These measures will both reinforce existing partnerships and create new relationships that support our sustainability efforts.

SOY: Soy is an important component in salmon feed, primarily serving as a protein source.

Reasons for using soy in salmon feed include:

HIGH PROTEIN QUALITY: Soy has a high protein content and also contains essential amino acids necessary for salmon growth and health.

SUSTAINABILITY: All soy used in the SG-feed is certified by ProTerra or similar standards, ensuring it is deforestation-free and is produced with consideration for the environment.

NON-GMO: None of the ingredients, including soy, in the SG-feed is genetically modified (non-GMO).

As an ingredient soy contributes to reduce dependence on fishmeal, alleviating pressure on wild fish stocks.

CAN SOY BE SUSTAINABLE?

The carbon footprint of Brazilian soy is generally higher compared to European and North American soy. This increased footprint is primarily due to deforestation and changes in land use. In contrast, the most efficient production methods for soy in Europe and the USA exhibit significantly lower CO2 footprints, thereby contributing positively to our objective of a low CO2 footprint for the SG-feed.

MIKROALGER: Microalgae and microalgae oil, commonly referred to as algae oil, are utilized in salmon feed as substitutes for traditional marine ingredients such as fish oil. Rich in essential nutrients, particularly omega-3 fatty acids, microalgae is an important raw material for the growth, health, and quality of salmon.

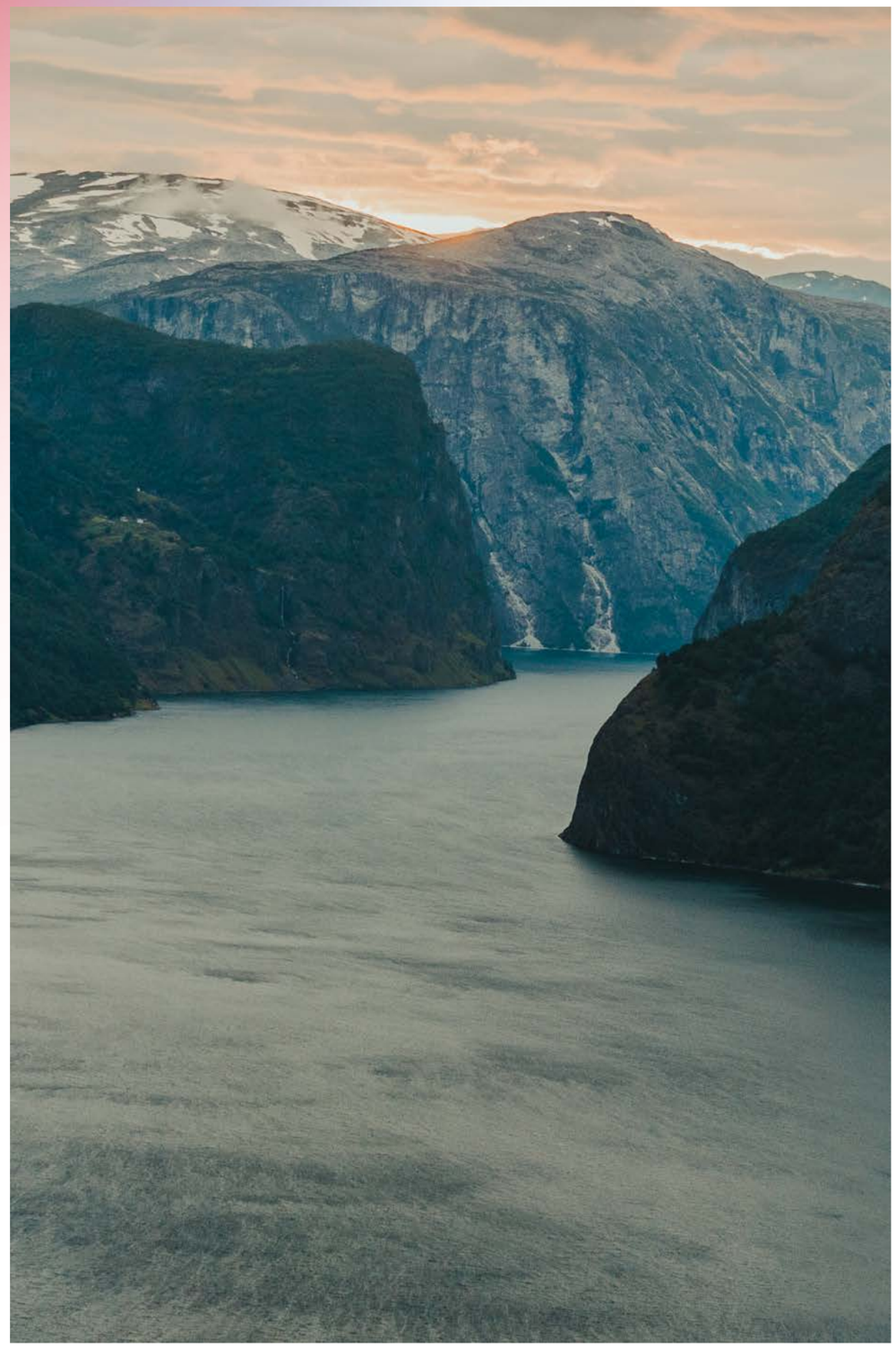
Microalgae in salmon feed offers several benefits:

SUSTAINABILITY: Cultivation of microalgae requires smaller areas and fewer resources compared to traditional feed ingredients.

REDUCED ENVIRONMENTAL IMPACT: Using microalgae can alleviate pressure on wild fish stocks and reduce the environmental impact of fish farming.

KRILL: In salmon feed, krill meal is used as an ingredient due to its high nutritional value and positive effects on fish health and fillet quality.

EPA/DHA: These are two types of omega-3 fatty acids essential for fish health and welfare. Naturally occurring in marine raw materials, these fatty acids are critical components of fish feed. EPA and DHA are integral for maintaining the immune system, promoting growth, and ensuring overall fish health. Research indicates that a balanced ratio of EPA to DHA in fish feed improves the ability to manage stress and effectively recover from injuries. In addition to the health benefits, EPA and DHA also contribute to the quality of fish fillets in terms of color and texture. Sufficient levels of these fatty acids in the SG-feed are a key factor for maintaining optimal fish health and production.



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