



Leading
the Blue
Revolution

MOWI ASA GREEN BOND FRAMEWORK

JANUARY 2020

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BACKGROUND

About us

Mowi is the world's largest producer of farmed salmon, both by volume and revenue, offering seafood products to approximately 70 countries world-wide. Since Mowi's pioneering days in 1964, we have continued to invest in the full value chain and today, we enjoy full control of our product: from the parental broodstock through to sales. Mowi is a vertically integrated company that is divided into three business areas: Feed, Farming, and Sales & Marketing (detailed in Figure 1 in Appendix). We employ almost 15,000 people and operate in 25 countries across the globe.

Leading the Blue Revolution

At Mowi, we work with the ocean to produce nutritious, delicious and supreme-quality seafood. We fulfil one fifth of global demand for farm-raised Atlantic salmon and are constantly driven by innovation and the desire to achieve the highest standards of sustainability. Mowi was ranked number one in the Collier FAIRR Protein Producer Index for 2019, which ranks the largest global meat, dairy and fish producers by looking at risk factors ranging from antibiotics use to deforestation and labour abuses. We are committed to the principles of the United Nation's (UN) Global Compact and pursue an integrated sustainability strategy aligned with the UN's Sustainable Development Goals (SDGs). We are also committed to transparency reporting according to global standards such as the Global Reporting Initiative (GRI).

Leading the Blue Revolution Plan is our sustainability strategy and includes long-term targets for our guiding principles, namely Planet, People, Product and Profit. Balancing the four principles is a prerequisite for achieving the targets and for creating long-term value. This ensures that, in addition to delivering healthy shareholder returns and ensuring access to capital, we also continue to deliver a premium product with minimal negative impact on the environment while also generating value for the local communities in which we operate. Progress towards our targets is well underway and publicly available in our integrated annual reports. Our Leading the Blue Revolution plan gives direction and outlines possibilities.

The possibilities lie in the increased need for protein to supply a growing and increasingly prosperous world population with healthy, sustainable food products. We believe the most efficient way to produce more protein is by farming the ocean. Approximately 70% of our planet is covered by water, yet only around 2% of the world's food supply comes from the ocean. Recent decades have seen many wild fish stocks fully exploited and global average capture trends are either declining or at best flatlining. With wild-capture fisheries under increasing pressure and an increasing global population to feed, it is important that aquaculture bridges the gap, assuming an increasingly greater role in providing sustainable food security for the planet.

At Mowi, we believe that by farming the ocean, we can sustainably produce healthy, nutritious and affordable food for society at large. Soil erosion, the current over-exploitation of the vast majority of arable land and the already apparent stresses being placed on freshwater resources are other worrying trends that highlight the need to look to farming the oceans. Salmon has a carbon footprint of one tenth that of beef and aquaculture is the sector least dependent on freshwater and land resources and is incredibly resource efficient in comparison with its terrestrial equivalents. Concerns about climate change are influencing dietary choices and the increased consumption of fish can reduce global greenhouse gas (GHG) emissions and improve human health.

Mowi's aim is to be an integrated provider of proteins from the ocean, taking the lead in all key areas, from the production of fish feed to meeting the needs of the market. We believe that investments in new knowledge and research will allow for a sustainable increase in ocean-based food production. At Mowi, we utilize our full value chain, empowered by new and emerging technologies, to make significant strides to improve our production. Mowi is the only salmon producer with operations in all major farming areas, and we hold internal control of our own genetics, feed, farming operations, harvesting, processing and logistics. This provides us opportunities that are difficult to match or copy. We gather data, experiences and production practices from a global operation, to benefit one common Mowi value chain.



MOWI GREEN BONDS

Mowi aims to lead the blue revolution by a sustainable production of healthy, nutritious and affordable food for society at large. Our aim is to raise current standards as well as setting new ones for the whole industry to follow. By setting up this document (“Green Bond Framework” or “Framework”), Mowi aims to mobilize debt capital to promote the transition towards a low-carbon and environmentally sustainable society. This Framework, aligned with the Green Bond Principles published in June 2018 by the International Capital Market Association (ICMA), defines the investments eligible for financing by green bonds issued by Mowi (“Green Bonds”).

In addition, the Framework outlines the process used to identify, select and report on eligible projects and the set-up for managing the Green Bond proceeds. The terms and conditions of the underlying documentation for each Green Bond shall provide a reference to this Framework.

Mowi has worked with Danske Bank, DNB and Nordea to develop the Framework and CICERO Shades of Green has provided a second party opinion, which is publicly available at our website. Mowi will assign an external auditor to annually provide a limited assurance of the management of proceeds.

January 2020

Ivan Vindheim
Chief Executive Officer

Kristian Ellingsen
Chief Financial Officer

Catarina Martins
Chief Sustainability Officer



USE OF PROCEEDS

Allocation of net proceeds

An amount equal to the net proceeds of the Green Bonds will finance or refinance, in whole or in part, investments undertaken by Mowi or its subsidiaries that promote the transition towards a low-carbon and environmentally sustainable society ("Green Projects"), in each case as determined by Mowi in accordance with the Green Project categories defined on the following pages. Green Projects will form a portfolio of assets eligible for financing and refinancing by Green Bonds.

Financing and refinancing

Net proceeds can finance both existing and new Green Projects financed by Mowi or its subsidiaries. New Green Projects are defined as projects taken into operation less than 12 months prior to the approval by Mowi's Green Bond Committee. Refinancing is defined as financing for Green Projects taken into operation more than 12 months prior to the Green Bond Committee's approval. The distribution between new financing and refinancing will be reported on in Mowi's annual Green Bond reporting.

Exclusions

Green Bond net proceeds will not be allocated to projects for which the purpose of the project is fossil energy production, nuclear energy generation, weapons and defense, potentially environmentally harmful resource extraction (such as rare-earth elements or fossil fuels), gambling or tobacco. Moreover, investments and expenditures for fossil fuel machinery and/or equipment are not eligible for Green Bond financing.

Sustainable Development Goals

The Sustainable Development Goals (SDGs) were adopted by all 193 United Nations member states in 2015 and guide governments, civil society and the private sector in a collaborative effort for change towards a sustainable development. Mowi contributes to several of the goals on a corporate level. In this Framework, each Green Project category has been mapped to the SDGs in accordance with the [High-Level Mapping to the Sustainable Development Goals](#) published by the International Capital Market Association.

GREEN PROJECT CATEGORIES

Environmentally sustainable aquaculture

The financing or refinancing of investments and expenditures related to construction, development, maintenance, acquisition and improvement of sustainable feed production facilities, fish farms and processing facilities as well as research and development and environmental management.

Sustainable feed

Mowi produces sustainable fish feed in its own production facilities, as well as sourcing from external parties. Ensuring full traceability of feed raw materials and a low feed conversion ratio are key elements of our sustainable feed strategy.

- Investments and expenditures related to sourcing and production of sustainable feed in compliance with Mowi's policy on sustainable salmon feed² and including requirement on 100% deforestation-free soy (ensured by ProTerra certification or by certification scheme with equivalent requirements, ensuring segregation of certified and non-certified soy).

Sustainable fish farms

Sustainable salmon farming centres around biodiversity, pollution prevention and fish welfare and third-party certifications are an important part of Mowi's sustainability work.

- Investments and expenditures related to fish farms certified, or in preparation to become certified, by the Aquaculture Stewardship Council (ASC) salmon standard (see Figure 3 in Appendix for more details), using feed in accordance with above criteria.

Sustainable processing

Mowi operates primary and secondary processing facilities with a strong focus on plastics management, energy consumption, water usage and waste management.

- Investments and expenditures related to processing facilities that are certified, or expected to become certified, using CoC (Chain of Custody) to ensure traceability of ASC products.

Research and development

With operations in all major farming areas, Mowi has the opportunity to use extensive data, experiences and production practices to conduct relevant research and development (R&D) within ocean-based food production.

- Costs related to R&D aimed at improving the environmental performance of feed, fish farms and processing.

Environmental management and fish welfare

- Investments to protect, restore and enhance ecosystems and biodiversity, such as escape prevention (e.g. sensors technology) and the reduction of microplastics.
- Investments in fish welfare, including sea lice management and the prevention and reduction of medicine and antibiotic use.

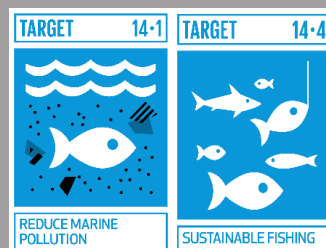
Background & importance of sustainably managed aquaculture

The main environmental challenges for the salmon aquaculture industry relate to sourcing of feed raw materials, interaction with wildlife, fish health and benthic impact.³ Feed raw materials, when not sourced sustainably, can contribute to overfishing since fishmeal and oil from wild fish are common ingredients in farmed fish feed and to deforestation, if soy originating from deforested areas is used as a vegetable ingredient. Interaction with surrounding wildlife occurs due to most global salmon farming taking place in sea-based open net pens. Sea lice outbreaks can spread to wild salmon populations and farmed fish can escape and mix with wild stocks. Medicine use, if not carried out responsibly, can impact non-target species in the environment. Organic waste resulting from uneaten feed and faeces can impact the seabed when farms are poorly managed. National regulations are currently not sufficient to address these challenges properly and third-party certification schemes have therefore been developed to fill the gaps and set out stricter requirements for the industry. Studies have shown that the most important contributions from the ASC certification are the requirements on fish escapes and certified feed raw materials, the responsible use of medicines and tougher requirements on monitoring the seabed impact.³

Mowi's approach to sustainable aquaculture

Our business depends on a healthy ocean. We minimise our environmental impact by monitoring, applying best practices and following the strictest environmental standards available for aquaculture. These efforts are guided by the following targets:

- ✓ 100% ASC certification by 2025
- ✓ Science Based target of reducing absolute GHG emissions (Scope 1, 2 & 3) throughout our value chain by 35% in 2030 and 72% in 2050
- ✓ Zero fish escapes
- ✓ Reducing sea lice medicine & antibiotic use while safeguarding fish welfare
- ✓ 100% compliance with our sustainable feed sourcing policy, ensuring full traceability of feed raw materials, sustainable sourcing of marine raw materials and deforestation-free soy





Energy efficiency

The financing or refinancing of solutions that significantly reduces the energy consumption of the underlying asset, technology, system or production process.

- Energy saving initiatives contributing to a reduction in the energy consumption of the farming or production plant by at least 20%, such as smart control systems, energy efficiency lighting, sensors for lighting solutions, heat exchangers, solar boiler systems etc.
- Direct costs (e.g. material, installation and labour) for implementing energy saving initiatives, such as upgrading equipment, energy efficient cooling and drying systems, or costs for enabling renewable energy sources related to the facilities. Mowi will ensure all of the following:
 - i. High estimated energy savings in the targeted area (minimum 20%).
 - ii. Minimize long term negative climate impact and potential rebound effects.
 - iii. Minimal negative climate impact from the technology used.

Background & importance of energy efficiency in the aquaculture sector

Feed production is typically the major energy consuming process in fish farming and both the feed-conversion ratio and feed composition directly affect the environmental impacts of feed-related production. Processing of farmed fish is the second largest energy consumption stage in the value chain. Improving energy efficiency in the production is thus important in order to decrease the footprint of the sector.

Mowi's energy saving initiatives

It is essential that Mowi acts responsibly, transparently and proactively to reduce energy use. Key efforts will be to reduce our absolute GHG emissions and energy intensity at the processing plants and in the feed business area. Examples of measures that have been implemented so far include energy saving initiatives at our primary and secondary processing plants, such as the replacement of incandescent lights to LED lights. We also have ongoing initiatives in our feed production, such as upgrading drying equipment for better control of air flow and reuse of condensate water from vacuum pumps. Our energy consumption and GHG emissions data are reported internally on a quarterly basis, and is audited annually. We disclose our GHG emissions strategy and performance in association with the Carbon Disclosure Project (CDP).



Key targets covering this area include:

- ✓ Prioritising the use of equipment that maximises energy efficiency
- ✓ Reducing feed conversion ratio (less feed equals less raw materials and less energy)
- ✓ Switching from diesel to onshore electrical power supply wherever possible
- ✓ Increase the share of renewable energy used during farming and processing
- ✓ Supporting research on the use of renewable energies at exposed sites
- ✓ Optimise our downstream transportation
- ✓ Optimize sourcing of feed raw materials based on their carbon footprint



Water & wastewater management

The financing or refinancing of the establishment, acquisition, capacity expansion and upgrade of sustainable wastewater treatment solutions, the associated infrastructure and water efficiency measures, including:

Wastewater treatment

Improving wastewater treatment leading to reduced volumes of wastewater or improved water quality, such as technical solutions leading to more concentrate wastewater to facilitate its disposal or upcycling.

Water-use efficiency

Improving freshwater use efficiency through technological improvements at the farming units, feed and processing plants (minimum 20% efficiency improvement).

Background & importance of investments in water & wastewater management

Many aquaculture systems generate high amounts of wastewater containing substances such as solid waste, nitrogen and phosphorus. It is therefore important to invest in more efficient systems for wastewater treatment. A high level of freshwater efficiency is also important for the aquaculture sector so that water resources are not depleted.

Mowi's water & wastewater management strategy

Mowi is committed to reducing our water footprint and improving systems for wastewater treatment. Freshwater is key to Mowi's operations, both to farm our fish and to keep the high hygienic standards at our processing plants. The majority of freshwater in our business is used to produce the initial life stages of Atlantic salmon. Such production is done in countries and areas with no water scarcity. Our strategy in this area is focused on increasing freshwater use efficiency at our processing plants without compromising the high standards of hygiene and continue to invest where possible to improve water use efficiency through technological innovations at our freshwater farming sites.

TARGET 6-3  IMPROVE WATER QUALITY, WASTEWATER TREATMENT AND SAFE REUSE	TARGET 6-4  INCREASE WATER-USE EFFICIENCY AND ENSURE FRESHWATER SUPPLIES
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Key targets covering this area include:

- ✓ Improvement of freshwater use efficiency at processing plants
- ✓ Reductions in production time in sea by growing smolt larger in fresh-water. This in turn has positive effects on biological performance (in-creased survival rates, reduced treatment requirements and generally improved fish welfare)



Waste management

The financing or refinancing of the establishment, acquisition, expansion or upgrades of solutions contributing to the management, reduction and reuse of waste.

- Initiatives contributing to an efficient management of waste and reduced need of virgin raw materials. This can include e.g virgin plastic and the collection and treatment of particulate organic matter to be re-used for other productive purposes such as fuel for biogas and soil fertilizer.

Eco-efficient and/or circular economy adapted products, production technologies and processes

The financing or refinancing contributing to eco efficiency and circular adapted products and production processes.

- Investments in resource efficient products and solutions, such as new net and packaging designs focused on reducing, recycling and replacing plastic raw material. This can include light-weight packaging materials, developing mono-material solutions that are easier to recycle, finding compostable packaging alternatives and replacing plastic packaging by cardboard alternatives.

Background & importance of investments in waste management improvement & more eco-efficient production/products

The amount of waste generated in today's world is rising at alarming rates. Waste often ends up in water bodies and the oceans, impacting wildlife and biodiversity. Plastic pollution has become a global problem with huge amounts of plastic waste released into the oceans every year, resulting in the occurrence of micro- and nano plastics particles in the oceans. Plastic pollution from the aquaculture sector is mainly caused by mismanagement, deliberate discharge, and extreme weather⁴. As the frequency and severity of extreme weather events due to climate change is likely to increase in the future, urgent measures against pollution from waste is needed. These measures should strive to reduce, re-use, recycle, recover waste and avoid using material and equipment that is difficult to recycle.

Mowi's waste & plastics management strategy

Reducing waste in the first place and using waste as a resource by promoting a circular economy are two important components of our strategy. Mowi focuses on reducing, reusing, recycling and recovering waste, as well as on packaging design and enabling a circular economy by upcycling waste (e.g. feed waste, nylon waste). In terms of plastic pollution, we focus on avoiding any plastic litter ending up at sea, implementing ONE Mowi packaging design procedure, working with SeaBOS (Seafood Business for Ocean Stewardship) to scale up our impact on protecting the oceans from plastic litter which includes our support to the Global Ghost Gear Initiative, and monitoring microplastics and plastic-related contaminants in our fish.

Key targets covering this area include:

- ✓ Zero waste into landfill at our processing plants by 2025
- ✓ Circularity in our waste management
- ✓ By 2025, 100% of our plastic packaging will be reusable, recyclable or compostable
- ✓ By 2025 at least 25% of plastic packaging will come from recycled plastic content
- ✓ By 2023, all plastic farming equipment (nets, ropes, feeding pipes) is reused or recycled

TARGET	12-2	TARGET	12-4	TARGET	12-5
SUSTAINABLE MANAGEMENT AND USE OF NATURAL RESOURCES		RESPONSIBLE MANAGEMENT OF CHEMICALS AND WASTE		SUBSTANTIALLY REDUCE WASTE GENERATION	



GREEN PROJECT EVALUATION & SELECTION

Allocation of Green Bond proceeds

Mowi's overall management of environmental, social, corporate governance and financial risks is a core component of our decision-making processes. Our risk management strategy is stated in our policies, guidelines and instructions. The process for evaluation and selection of Green Projects will follow the same standard decision-making process.

Green project evaluation & selection process

Green Projects shall comply with the eligibility criteria defined under the Green Project Categories. The process of evaluating and selecting eligible Green Projects as well as the allocation of Green Bond proceeds to eligible Green Projects comprise the following steps:

- i. Sustainability experts and representatives within Mowi evaluate potential Green Projects, their compliance with the Green Project Categories, and their environmental benefits.
- ii. A list of the potential Green Projects are presented to Mowi's Green Bond Committee ("GBC"). The GBC is solely responsible for the decision to acknowledge the project as green, in line with the Green Project Criteria. Green Projects will be marked as green in a dedicated "Green Register". A decision to allocate net proceeds will require a consensus decision by the GBC. The decisions made by the GBC will be documented and filed.

Green Bond Committee (GBC)

The GBC is chaired by the Chief Sustainability Officer and includes the following members:

- Chief Sustainability Officer
- Chief Financial Officer
- Head of Treasury
- Chief Operating Officer for the relevant business area

The GBC will convene every six months or when otherwise considered necessary. For the avoidance of doubt, the GBC 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 under Management of Proceeds until reallocated to other eligible Green Projects.

MANAGEMENT OF PROCEEDS

Tracking of Green Bond net proceeds

Mowi will use a Green Register to track the allocation of net proceeds from Green Bonds to Green Projects. The purpose of the Green Register is to ensure that Green Bond net proceeds only support the financing of Green Projects or to repay Green Bonds.

The management of proceeds will be reviewed by an external auditor appointed by Mowi.

Temporary holdings

Unallocated Green Bond net proceeds may temporarily be placed in the liquidity reserve and managed accordingly by Mowi.

Exclusions

Temporary holdings will not be placed in entities with a business plan focused on fossil energy production, nuclear energy generation, weapons and defense, potentially environmentally harmful resource extraction (such as rare-earth elements or fossil fuels), gambling or tobacco.

REPORTING & TRANSPARENCY

Mowi will annually and until maturity of the Green Bonds issued, provide investors with a report describing the allocation of proceeds and the environmental impact of the Green Projects. The report will be made available on our website together with this Green Bond Framework.

Allocation

Allocation reporting on proceeds will include the following information:

- I. A summary of Green Bond developments
- II. The outstanding amount of Green Bonds issued
- III. The balance of the Green Projects in the Green Register (including any temporary investments and Green Bond repayments) and the available headroom in the value of the Green Projects (if any)
- IV. The total proportion of Green Bond net proceeds used to finance new Green Projects (taken into operation less than 12 months prior to the approval by Mowi's Green Bond Committee) and the proportion of Green Bond net proceeds used to refinance Green Projects taken into operation earlier than that
- V. The total aggregated proportion of Green Bond net proceeds used per Green Projects Category

Impact reporting

The impact reporting aims to disclose the environmental impact of the Green Projects financed under this Framework, based on Mowi's financing share of each project.

As Mowi can finance a large number of smaller Green Projects in the same Project Category, impact reporting will, to some extent, be aggregated.

The impact assessment is provided with the reservation that not all related data can be covered and that calculations therefore will be on a best intention basis.

The impact assessment will, if applicable, be based on the Key Performance Indicators (KPIs) presented in the table below and on the next page.

IMPACT REPORTING

Green Project Category	Indicative Key Performance Indicators (KPIs)
Environmentally sustainable aquaculture TARGET 14-1  REDUCE MARINE POLLUTION TARGET 14-4  SUSTAINABLE FISHING	<u>Sustainable feed</u> • Volume of certified sustainably-sourced and produced feed • GHG emissions savings relative to comparable products (tonnes per year) <u>Sustainable fish farms</u> • Sites certified according to the Aquaculture Stewardship Council (ASC) salmon standard • Reduced fish escapes (%) • % of sites with minimum benthic impact <u>Sustainable processing</u> • Reduction in plastics use, reduction in energy consumption, water usage & waste management <u>Research and Development</u> • Type of project and issue addressed <u>Environmental management & fish welfare</u> • Reduction in sea lice medicine use (g active ingredient per tonne produced) • Reduction in antibiotic use (g active ingredient per tonne produced) • Type of project and issue addressed
Energy efficiency TARGET 7-3  DOUBLE THE IMPROVEMENT IN ENERGY EFFICIENCY	• Annual energy reduced/avoided (MWh) • Annual GHG emissions reduced/avoided (tonnes of CO₂e emissions)
Water & wastewater management TARGET 6-3  IMPROVE WATER QUALITY, WASTEWATER TREATMENT AND SAFE REUSE TARGET 6-4  INCREASE WATER-USE EFFICIENCY AND ENSURE FRESHWATER SUPPLIES	<u>Wastewater treatment</u> • Annual reductions in discharges of wastewater or improved water quality • Volume of solid sludge collected and treated for re-use (tonnes per year) <u>Water use efficiency</u> • Water savings (cubic meters per year and %) • Reduced production time in sea
Waste management TARGET 12-2  SUSTAINABLE MANAGEMENT AND USE OF NATURAL RESOURCES TARGET 12-4  RESPONSIBLE MANAGEMENT OF CHEMICALS AND WASTE	• Quantity of waste that is prevented, minimised, reused or recycled before and after project (tonnes or % of total waste per year) • Reduced/avoided GHG emissions as a result of the investment (tonnes of CO₂e per year)
Eco-efficient and/or circular economy adapted products, production technologies & processes TARGET 12-5  SUBSTANTIALLY REDUCE WASTE GENERATION	• % of recycled plastic content in plastic packaging • % of plastic packaging that is reusable, recyclable or compostable • GHG emissions savings relative to comparable products or as a result of recycling/reusing of material (tonnes per year)

EXTERNAL REVIEW

Second Party Opinion

CICERO Shades of Green has provided a second opinion to this Framework verifying its credibility, impact and alignment with the ICMA Green Bond Principles 2018.

Assurance

An independent external auditor appointed by Mowi will provide, on an annual basis, limited assurance that an amount equal to the Green Bond net proceeds has been allocated to Green Projects.

Publicly available documents

The Green Bond Framework, the second party opinion, the limited assurance and the annual Green Bond Report will all be publicly available on Mowi's website.

REFERENCES

¹ Latest version of [Mowi's Blue Revolution Plan](#)

² Current policy can be found on Mowi's [website](#) and the company is also aiming to implement the upcoming ASC Feed Standard once available

³ O. Luthman, M. Jonell, M. Troell., Governing the salmon farming industry: Comparison between national regulations and the ASC salmon standard, 2019

⁴ Marine Litter and Aquaculture Gear, White Paper, ASC, November 2019



APPENDIX

Figure 1: Mowi's three business areas



Figure 2: Certification schemes used along the value chain



Figure 3: The ASC standard

Aquaculture Stewardship Council (ASC)

ASC is an independent, international non-profit organisation that manages certification and labelling for responsible aquaculture. This includes high standards for fish escapes, nutrient release, biodiversity, use of medicines and sustainable feed ingredients. In addition to environmental indicators, the ASC standard also contains numerous social indicators to ensure that salmon farming is undertaken in a socially acceptable manner.

<https://www.asc-aqua.org/what-we-do/our-standards/farm-standards/the-salmon-standard/>