

## **Mowi Policy on Biodiversity and Natural Capital**

Global biodiversity and ecosystem integrity continue to be eroded at unprecedented rates. It has therefore never been more important to safeguard our environment. It is essential that Mowi acts responsibly, transparently, and proactively to preserve biodiversity and the ecosystem goods and services that natural resources provide us with (i.e., natural capital).

Mowi's vision is to Lead the Blue Revolution and unlock the potential of the ocean in a way that respects our planet. Our operations must contribute to stable and resilient ecosystems, and we must co-exist within planetary boundaries. Our stewardship of the environment is essential to reach our long-term goals and to safeguard the interests of future generations.

We need healthy oceans, not only to drive sustainable salmon farming, but also to combat climate change, preserve and enhance the oceans' capacity to provide healthy Blue Foods, support flourishing societies and buoyant national economies.

We acknowledge that aquaculture activities can potentially impact biodiversity. To address these concerns, we have a number of comprehensive policies in place to responsibly manage the sourcing of feed ingredients (including marine and terrestrial raw materials), organic loading/nutrient release, medicinal treatments, sea lice impacts, fish escapes and greenhouse gas emissions. Indirect impacts such as deforestation and land-use changes are also addressed by using 100% deforestation-free soy as a feed raw material. We strive to keep any negative impacts to an absolute minimum. Where impacts are identified in our operations, our biodiversity policy works toward minimising them.

This biodiversity policy outlines how Mowi manages its operations with biodiversity considerations at the forefront. It has been formulated following a benchmarking process against the EU Green Deal as well as the latest developments in the Taskforce on Nature-related Financial Disclosures (TNFD) and the World Benchmarking Alliance's Nature and Biodiversity Benchmark.

### **Mowi's biodiversity and natural capital governance**

Biodiversity and natural capital conservation is governed through Mowi's sustainability strategy, the implementation of which is driven by Mowi's Global Sustainability Networks, which are run by the Chief Sustainability Officer (CSO). The CSO is a member of the Group Management Team and reports directly to the CEO. Mowi's Sustainability Network is in place as part of our governance groups to support strategic discussions on biodiversity and natural capital risks and opportunities. The management team and the Networks have oversight of the group's environmental footprint, biodiversity, and natural capital impacts. They work to meet Mowi's many specific targets and criteria that relate to the preservation of biodiversity and natural capital. These appear throughout many of our other policies including our policies on sustainable salmon feed and emerging feed raw materials, freshwater use and wastewater discharge, plastics, use of antimicrobial agents, integrated pest

management (IPM) for sea lice control, salmon welfare and climate change and energy use policies.

Mowi is committed to achieving 100% compliance with prevailing environmental laws, regulations, and relevant standards – and strives to go above and beyond these where possible. Our aim is to continuously work to improve Mowi's environmental management systems to reduce our environmental impact and thus our impacts on biodiversity and natural capital. Mowi's sustainability strategy, Leading the Blue Revolution Plan, acknowledges the material importance of the preservation of biodiversity, the development of the circular economy and climate-friendly food production (amongst other biodiversity-relevant themes) - all focal issues within the EU Green Deal.

## Scope

The scope of this policy is global and includes all business areas: feed, farming and sales and marketing. Mowi minimises its impacts on biodiversity and natural capital by:

### Responsibly sourcing sustainable feed ingredients:

- Mowi Feed is continuously searching for improved feed formulations and aims to reach an inclusion of 10-15% ingredients from emerging feed raw materials by 2030. By maximising FCR through rich nutrient profiles Mowi ensures the best fish performance, health and welfare. As a minimum, all Mowi's salmon feed suppliers are GLOBALG.A.P. or BAP certified.
- Marine raw materials processed from whole fish are either certified as sustainable by the Marine Stewardship Council (MSC) and / or MarinTrust standard and / or are part of Fisheries Improvement Projects (FIPs) and / or are part of the MarinTrust improver programme and / or achieve Fish Source scores  $\geq 6$  in all categories.
- Mowi has reduced its Fish in - Fish out (FIFO) ratio to levels well below 1 and continues to increase the circularity of marine by-products by repurposing them to ensure the recapture of valuable marine raw materials.
- Mowi supports efforts to increase purchases of sustainably sourced terrestrial raw materials documented through soy certified by ProTerra, Europe Soy Standard or supplied from producers applying the Roundtable for Responsible Soy (RTRS) and Sustainable Palm Oil (RSPO) standards or equivalent.
- Mowi will continue to purchase feed ingredients from verified sustainable sources as we expand our portfolio of non-marine raw materials.
- All feed ingredients have rigorous traceability systems in place, as a minimum recording:
  - the volumes per species, country of origin and fishery for marine ingredients including those originating from trimmings;
  - the volumes, crop types and harvest region for terrestrial raw materials.

### Reducing water and benthic pollution

- Mowi aims to maximise farm performance and minimise feed pellet loss through the use of Smart Farming technologies and autonomous feeding.
- Additionally, we keep stocking densities at sea well below 25 kg/m<sup>3</sup>. These strategies ensure that we remain well within the carrying capacities of the environments in which we operate.
- Mowi pays special attention to critical, highly sensitive environmental areas, special areas of conservation (SAC), and special protected areas (SPA) located close to / around our farm sites.
- Regular benthic surveys allow us to adapt our farming practices to ensure they have minimum impacts on the seabed and surrounding areas.
- All our farming operations are certified according to standards that account for biodiversity (e.g., GLOBALG.A.P., BAP and ASC). In doing so, we ensure impacts are kept to a minimum.

### Minimising the use of plastics and plastic recycling

- We aim to avoid the use of single-use plastic wherever possible and encourage its substitution with more environmentally friendly materials. Where the use of plastics is unavoidable, we encourage the use of recycled plastics.
- By maintaining standards at our farming sites, feed plants and processing plants, Mowi aims to prevent the escape of plastic litter into the environment and all operational waste is collected and disposed in compliance with national legislation.
- Mowi is constantly seeking alternative packaging solutions designed for material reduction, reuse, recycling, and composting and strives to use recycled and certified materials.

### Prudent and responsible medicinal treatments

- All medicinal treatments are prescribed by certified veterinarians/fish health professionals and are strictly controlled by the authorities. Medicines are never used prophylactically or to promote growth.
- Mowi only uses medicines when other measures are not sufficient or when fish welfare may be compromised. To reduce the need for antimicrobial use, Mowi vaccinates 100% of its fish for most bacterial and viral infections.
- Mowi complies with World Health Organisation (WHO) Guidelines on the Use of Medically Important Antimicrobials in Food Producing Animals and the WHO list of Critically Important Antimicrobials for Human Medicine.
- Mowi promotes the 3 R's framework (Refine, Reduce and Replace) on antimicrobial stewardship in veterinary medicine. This helps us manage the risk of antimicrobial resistance throughout our operations.
- Our prudent and responsible use of antimicrobials meets and exceeds regulatory requirements and industry guidelines. All Mowi farms are certified to respected standards, namely GLOBALG.A.P., ASC and BAP, that address aspects of antimicrobial use and reducing the risk of resistance development.

### Using non-medicinal sea lice management and prevention techniques

- Effective sea lice management is important for fish welfare and ensuring lice on our farms do not negatively impact wild salmonid stocks.
- Mowi uses an Integrated Pest Management (IPM) system that involves a comprehensive and systematic approach to pest management and is considered highly important for effective sea lice management.
- Whenever possible, Mowi's IPM uses non-medicinal approaches to pest control, including dynamic prevention techniques, such as the use of skirts around pens, deep lights, deep feeding, and combinations of these.
- Other non-medicinal tools that we employ are cleaner fish (wrasse and lumpsuckers that eat sea lice off the salmon's skin), freshwater baths, as well as thermolicers and hydrolicers, which use temperature and water, respectively, to non-medicinally address sea lice issues.

### Ensuring fish escapes are avoided at all costs

- Mowi aims to achieve zero escapes. To reach this target, Mowi implements a global training programme on escape prevention and mitigation; all of our farmers have passed this training programme.
- Mowi has established a Global Escape Action Group to define key improvement priorities, track progress, and share learned experiences regarding fish escapes.
- To protect our salmon and prevent escape incidents we have implemented different approved preventative measures, with the primary objective of preventing attacks by using passive control methods, such as anti-predator nets. In rare cases, when attacks are too aggressive and persistent, undesired killing may be the only option. This is only ever carried out as a last resort and in accordance with relevant local regulations.

### Sourcing and operating to reduce deforestation and other land-use changes

- To ensure Mowi do not inadvertently contribute to deforestation or other detrimental land-use changes, any potential new suppliers is risk-assessed as part of our on-boarding procedure and audited when needed.
- We work together with our Soy Protein Concentrate (SPC) suppliers - ProTerra and the other feed companies within the Aquaculture Dialogue - on sustainable soy sourcing from Brazil to further develop sustainable sourcing by achieving more transparency through traceability tools.
- 100% of our soy originates from deforestation-free areas and is either Proterra or Europe Soya Standard certified.

### Reducing greenhouse gas emissions

- At the end of 2019, Mowi set clear, science-based targets (SBT approved) for reduction of scope 1, 2 and 3 emissions to be reached by 2030.
- Mowi will reach these targets by:

- developing more efficient feeds that prioritise feed raw materials that reduce GHG emissions without reducing fish performance and welfare;
- sourcing terrestrial raw materials from deforestation-free areas;
- prioritising the use of technology that supports a low-carbon transition plan;
- building new feed plants that are energy-efficient;
- increasing the share of renewable electricity used on-site;
- maximising fillet yield production;
- improving our packaging solutions;
- optimising logistics and crew transportations.

### Continuous improvement through R&D

Mowi is at the forefront of aquaculture technology development and implementation. Our advances are now paving the way for SMART Farming both in our freshwater and seawater farming operations as well across our complete value chain. Through the use of digitalisation and automation we expect more efficient use of natural resources.

### Monitoring

Mowi has rigorous and transparent operational and performance monitoring systems in place. These span all the potential biodiversity impacts noted in this policy. Reporting varies dependent on the process and / or impact being measured.

Mowi benchmarks its operations against comprehensive and rigorous policies and industry processes, including the EU Green Deal the guidelines from the Taskforce on Nature-related Financial Disclosures (TNFD), and the World Benchmarking Alliance's Nature and Biodiversity Benchmark. Mowi's benchmarking processes are run by third parties to ensure objective, unbiased results and recommendations that Mowi can build into their future policies and research and development (R&D) investments.

Mowi is consistently identifying and evaluating nature-related dependencies and nature impacts, through environmental impact assessments, to inform our analyses of risks and opportunities. Our monitoring programme and R&D investments ensure we have a clear and up to date understanding of our nature-related risks and opportunities. In addition to Mowi's ongoing monitoring programmes, we invest considerable efforts in R&D related to biodiversity and natural capital issues (see Appendix 1).

August 2022

## Appendix 1: Mowi's Biodiversity-related projects

- Monitoring potential effects of fish farming operations on nutrient levels and macroalgae;
- Studying migration patterns of wild trout and salmon smolts;
- Strengthening local conservation of salmonid waterways;
- Research on the reproductive success of wild Atlantic cod;
- Investigating sea lice infestation and dispersal on sea trout;
- Research on migration of wild salmon from native river systems;
- Reviewing antifouling net options - this project examines fish welfare as well as impacts on the benthic environment;
- Developing a new biodiversity index and classification system of macrofauna;
- Understanding wild juvenile sea trout migrations and to better understand salmon louse populations around our salmon farms;
- Assessing the risk of establishment of Atlantic salmon in Chile;
- Understanding the effects of our marine farms on wild salmon stocks - particularly focusing on migration patterns of wild salmon and sea lice levels in wild salmon;
- Validating spatial benthic footprint predictions with monitoring of organic deposition;
- Researching the genetic and population ecology of wild wrasse in Irish bays;
- Development of a sustainable fisheries management plan for wild caught cleaner fish;
- Forecasting harmful jellyfish blooms and biofouling for the salmon aquaculture industry;
- Developing and validating eDNA tools for benthic monitoring in 2021;
- Developing an efficient, reliable and environmentally friendly approach for assessing benthic impact;
- Measuring and tracking the gradient of benthic recovery following the cessation of farming;
- Developing and improving management tools for farmed/wild fish interactions in terms of sea lice dispersion models and interaction between wild and farmed fish;
- Integrated Multi Trophic Aquaculture growing project, which combines salmon and shell-fish farming in close proximity, to examine ways to improve the productivity and environmental sustainability of marine aquaculture practices;
- Using sea cucumbers as a seabed bioremediation tool;
- Placement of beehives on the roof of Mowi Poland in Gdansk and at Mowi Bruges