## IMPACT DIMENSION IMPACT INDICATOR **PERFORMANCE RATIONALE** Life on Planet & Natural Resources

Climate Change	Product Carbon Footprint (PCF)		PCF 4.43 kg CO <sub>2</sub> eq./kg product at store
Biodiversity Loss	Loss of biodiversity & biosphere integrity		Moderate system- inherent risks (best practices)
Deforestation	Land use change due to deforestation		Organic feed standards (no deforestation allowed)
Freshwater Depletion	Risk for freshwater depletion		No direct risk, indirect risk through feed production
Eutrophication	Discharge of nitrogen (N) and phosphorous (P)		Organic system with moderate nutrient input (feed)
Toxic Compounds	Pollution with toxic chemicals and pesticides		Chemical compounds not allowed in organic farming
People & Coastal Communit	ies		
Human Rights	Human rights & decent work conditions		Low risk for human rights violations
Workers' Safety	Exposure to health & safety hazards		Low risk for unsafe working conditions
Community Inclusiveness	Fair value chain participation by communities		Family owned farm / limited community inclusiveness
Animal Welfare			

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Animal Welfare			
Living Conditions	Husbandry system & rearing conditions		Moderate stocking density and low habitat structur
Physical Stress	Stress & injuries during rearing and harvesting		Moderate risk for stress during rearing and harvestin
Humane Slaughter	Pain & suffering during slaughter		Effective stunning at harvesting before slaugthe



## **BLUEYOU OCEAN IMPACT TRACKER**

## METHODOLOGY FOR ASSESSMENT AND SCORING GUIDEPOST

## FARMED SEAFOOD

Version 1.0 Oct 2023

December 26, 2023 Assessment Date: Jonas Walker A-SAL-2 Assessor Name: Unit of Origin Code:

Atlantic Salmon (Salmo salar) Species Name Country of Origin Farming Area

Norway
Troms County, Northern Norway
Aquaculture
Marine Net Pens, Organic Certified Origin Type
Farming Method
Operation Type Family owned Operation

LIFE ON PLANET & NATURAL I	RESOURCES					_	
Impact Dimension	Parameter for Evaluation	Asessement Indicators and Metrics	Scoring Guidepost				Comments and Remarks for Assessment
			1 Negative impact / Critical performance	2 Moderate impact / Acceptable performance	3 Positive impact / Good performance		
Climate Change Impact	LCA-based carbon footprint	Carbon Footprint in Kg CO <sub>2</sub> Eq. / kg final product on POS in market	High footprint [ > 8.0 kg CO <sub>2</sub> eq./kg product at store]	Moderate footprint [3.0 - 8.0 kg CO <sub>2</sub> eq./kg product at store]	Low footprint [< 3.0 kg CO <sub>2</sub> eq./kg product at store]	2	PCF 4.43 kg Co2 eq / kg product at store
Ecosystems & Biodiversity	Biospere integrity and biodiversity loss	Biodiversity loss, ETP impact, wildlife interaction	Critical impact on habitats, wildlife and biodiversity through farming and feed inputs	Moderate impact on biodiversity and habitats through farming and feed inputs	Low impact or nature-positive food system	2	The operation is EU Organic certified. The EU Organic Standard encompasses strict criteria which minimize the negative impact on the environment. Nevertheless, Salmon farming and mostly the high input of nutrients in the marine ecosystem through feed application has been associated with negative impacts on the environmen especially the benthos.
Deforestation	Land system change due to deforestation	Deforestation of land for agriculture or aquaculture	Critical deforestation happening / no restoration efforts	Risk for deforestation (feed crops) / no restoration	No deforestation riks / active restoration ongoing	3	There is no direct deforestation risk due to the aquaculture operation. Indirect deforestation through feed ingredients is unlikely as all plant-based feed ingredients must be organic certified, which does not allow deforestation of land for new agriculture.
Freshwater Use	Depletion of freshwater	Use of freshwater and risk of depletion (feed and farming)	High consumption and critical risk for depletion	Moderate consumption / freshwater no depletion risk	No use of freshwater	2	No freshwater is used during grow-out and minimal freshwater might be used during hatchery operation. However, freshwater is used for the feed production
Eutrophication	Discharge of critical nutrients (N,P)	Risk of eutrophication in feed production and aquaculture	High risk (agriculture and aquaculture)	Moderate risk	Low / No Risk	2	Feed is used during grow-out. The EU Organic Standard encompasses strict criteria for water quality and effluent management. Effluent water needs to be filtered to remove additional nutrients. If filtering is not possible algae or bivalves which contribute to improving the quality of the effluent water are used
Toxic Compounds	Pollution with chemicals and pesticides	Use of chemicals, pesticides, antibiotics and toxic compounds	Frequent and continous use as part of SOP	Moderate and occasional use under GAP	No use as part of SOP	3	The EU Organic standard has a stringent set of criteria which regulates the use of any medication, especially if chemically synthesised. Only organic fertilizers are allowed.
PEOPLE & COASTAL COMMUN	VITIES						
Human Rights & Work Conditions	Human rights and decent work conditions	Risk for human right abuse and critical work conditions	High risk	Moderate risk	Low risk	3	The EU Organic standard does not encompass any social criteria. However, based on the country of origin, the risk of social non-compliance can be deemed low. Blueyou has visited operation in person and did not identify any risk of social non-compliance
Workers' Safety	Safe working conditons along supply chain	Risk for critical working conditions on farming and processing level	High risk	Moderate risk	Low risk	3	Based on the country of origin the workers' safety is deemed high (Norway). Blueyou has visited operation in person and did not identify any risk of social non-compliance
Community Inclusiveness	Fair value and participation of communities	Level of involvement of local community in farming and value chain	No / Low	Moderate	High	2	Salmon farming operation is owned and managed by family-based company. Community inclusiveness is limited, as generated value contributes to a few families only. Externalities are carried by all taxpayers.
ANIMAL WELFARE							
Living Conditions & Quality of Life	Husbandy system which respects natural behaviour	Husbandry systems, intensity level, natural environment	Inappropriate husbandry, High risk for overcrowding and prolongued stress	Species appropriate husbandry, moderate crowding	Natural environment, low densities	2	The living conditions for the salmon in the respective aquaculture systems are deemed good. This is mostly due to the lower stocking densities in organic systems. However, habitat structure within the net pens is low.
Capture, Harvesting & Handling	Reducing stress during harvesting & handling	Risk of exposure to prolonged stress, pain and injuries	High risk for prolonged stress, pain and multiple injuries	Moderate exposure to stress and improved handling	Optimized handling to reduce stress to minimum	2	The salmon are transferred to land by well-boat and let to rest for one full day before integration into processing.
Stunning & Humane Slaughter	Stunning before slaughtering	Vertebrate and Decapod Crustacean are stunned prior to killing	No stunning and prolonged suffering prior to death	No stunning but moderate risk for prolonged suffering	Effective stunning in place within minimal time	3	Salmon are stunned before killing through bleeding. Stunning is supervised and repeated if not successful