

IMPACT DIMENSION	IMPACT INDICATOR	PERFORMANCE	RATIONALE
Life on Planet & Natural Resources			
Climate Change	Product Carbon Footprint (PCF)		<i>Moderate PCF (3 - 8 kg CO₂ eq./kg product at store)</i>
Biodiversity Loss	Loss of biodiversity & biosphere integrity		<i>Well managed but system inherent risks</i>
Deforestation	Land use change due to deforestation		<i>No direct risk, indirect risk through feed production</i>
Freshwater Depletion	Risk for freshwater depletion		<i>Moderate direct risk, indirect risk through feed production</i>
Eutrophication	Discharge of nitrogen (N) and phosphorous (P)		<i>High nutrient input through feed but well-managed</i>
Toxic Compounds	Pollution with toxic chemicals and pesticides		<i>Strict criteria for the use of chemicals and toxic compounds</i>
People & Coastal Communities			
Human Rights	Human rights & decent work conditions		<i>Low risk for human rights violations</i>
Workers' Safety	Exposure to health & safety hazards		<i>Low risk for unsafe working conditions</i>
Community Inclusiveness	Fair value chain participation by communities		<i>Corporate farm, Fair Trade certified</i>
Animal Welfare			
Living Conditions	Husbandry system & rearing conditions		<i>Moderate stocking density and low habitat structure</i>
Physical Stress	Stress & injuries during rearing and harvesting		<i>Moderate risk for stress during rearing and harvesting</i>
Humane Slaughter	Pain & suffering during slaughter		<i>No stunning before transfer to ice slurry</i>



BLUEYOU OCEAN IMPACT TRACKER

METHODOLOGY FOR ASSESSMENT AND SCORING GUIDEPOST

FARMED SEAFOOD

Version 1.0 Oct 2023

Assessment Date: December 26, 2023
 Assessor Name: Jonas Walker
 Unit of Origin Code: A-PNV-3

Species Name: Pacific Whiteleg Shrimp (*Litopenaeus vannamei*)
 Country of Origin: Indonesia
 Farming Area: Lampung, South-Sumatra
 Origin Type: Aquaculture
 Farming Method: Semi-intensive Pond Aquaculture, ASC and Fair Trade USA
 Operation Type: Small Scale/Community based

LIFE ON PLANET & NATURAL RESOURCES

Impact Dimension	Parameter for Evaluation	Assesment Indicators and Metrics	Scoring Guidepost			Score	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 ₂ Eq. / kg final product on POS in market	High footprint (> 8.0 kg CO ₂ eq./kg product at store)	Moderate footprint (3.0- 8.0 kg CO ₂ eq./kg product at store)	Low footprint (< 3.0 kg CO ₂ eq./kg product at store)	2	The Carbon Footprint has been assessed by an independent third party: 5.3kg CO ₂ eq/kg edible product in final packaging at final retailer
Ecosystems & Biodiversity	Biosphere 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 farms are ASC certified and a thorough ecosystem impact assessment is conducted in the certification process. Further, the ASC encompasses strict ecosystem criteria which have to be met in order to be certified.
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 risks / active restoration ongoing	2	ASC-certified farms strictly have to comply with the cut-off date of 1999 (Ramsar agreement) after which no destruction of mangroves is allowed. This criterion is assessed by a third party using remote sensing data. The risk of direct deforestation due to the farming operation after 1999 is therefore deemed to be negligible. However, no active reforestation is conducted on farm level. Within the ASC Feed Standard, indirect deforestation through feed ingredients is addressed and producers must commit to transition to deforestation-free feed ingredients until January 2025
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 used during grow-out. The saline water used for the nursery and grow-out ponds is directly pumped from the surrounding estuary. However, freshwater is used for the production of the crops used for the feed.
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 ASC Standard encompasses strict criteria on water quality and effluent management and monitoring as well as setting upper limits for N and P loads for effluent waters.
Toxic Compounds	Pollution with chemicals and pesticides	Use of chemicals, pesticides, antibiotics and toxic compounds	Frequent and continuous use as part of SOP	Moderate and occasional use under GAP	No use as part of SOP	2	Inorganic fertilizer, medication and further chemical substances are allowed in the production period, however, the ASC has a stringent set of criteria which regulates the use of chemical substances and criteria which aim to minimize their use in the production

PEOPLE & COASTAL COMMUNITIES

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 farms are ASC and Fair Trade USA certified and therefore adhere to the strictest social criteria in the seafood industry
Workers' Safety	Safe working conditions along supply chain	Risk for critical working conditions on farming and processing level	High risk	Moderate risk	Low risk	3	The farms are ASC and Fair Trade USA certified and, therefore, adhere to the strictest social criteria in the seafood industry
Community Inclusiveness	Fair value and participation of communities	Level of involvement of local community in farming and value chain	No / Low	Moderate	High	3	The aquaculture ponds are managed by a community of small-scale farmers. Benefits generated through shrimp production are directly creating impact on the local community. Further, the Fair Trade USA premium which is generated through the sales of Fair Trade USA-certified shrimp products is collected and directly transferred to the local cooperative of shrimp farmers, which manages the received funds and decides how the funds will be spent.

ANIMAL WELFARE

Living Conditions & Quality of Life	Husbandry system which respects natural behaviour	Husbandry systems, intensity level, natural environment	Inappropriate husbandry, High risk for overcrowding and prolonged stress	Species appropriate husbandry, moderate crowding	Natural environment, low densities	2	The living conditions for the shrimp in the respective aquaculture systems are deemed good. This is mostly due to the relatively low stocking density of around 25 PL/m ² Pond Surface. The use of aeration ensures high enough DO levels throughout the water column. However, shrimp ponds show lower habitat structure than extensive mangrove integrated shrimp ponds.
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 shrimp are harvested and directly transferred to an ice slurry. The time between harvest and transfer to ice slurry is minimal
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	2	Shrimp are directly transferred to ice slurry after harvest (Chill Kill). For a tropical shrimp species, this is most likely a fast and humane killing method, however, no stunning of the shrimp is conducted before the transfer to the ice slurry.