IMPACT DIMENSION IMPACT INDICATOR PERFORMANCE RATIONALE

Life on Planet & Natural Resources

Climate Change	Product Carbon Footprint (PCF)		Moderate PCF (3 - 8 kg CO ₂ eq./kg product at store)
Biodiversity Loss	Loss of biodiversity & biosphere integrity		Well managed but system inherent risks
Deforestation	Land use change due to deforestation		No direct risk, indirect risk through feed production
Freshwater Depletion	Risk for freshwater depletion		Moderate direct risk, indirect risk through feed production
Eutrophication	Discharge of nitrogen (N) and phosphorous (P)		High nutrient input through feed but well-managed
Toxic Compounds	Pollution with toxic chemicals and pesticides		Strict criteria for the use of chemicals and toxic compounds
People & Coastal Communit	ties		
Human Rights	Human rights & decent work conditions		Low risk for human rights violations, ASC Social Criteria
Workers' Safety	Exposure to health & safety hazards		Low risk for unsafe working conditions, ASC Social Criteria
Community Inclusiveness	Fair value chain participation by communities		Corporate farm / no community inclusion
Animal Welfare			
Living Conditions	Husbandry system & rearing conditions		High stocking density and low habitat structure
Physical Stress	Stress & injuries during rearing and harvesting		Moderate risk for stress during rearing, low during harvesting
Humane Slaughter	Pain & suffering during slaughter		No stunning before transfer to ice slurry



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-PNV-2 Assessor Name: Unit of Origin Code:

Species Name Country of Origin Farming Area

Pacific Whiteleg Shrimp (Litopenaeus vannamei) Vietnam
Soc Trang Province, Vietnam
Aquaculture
Intensive Pond Aquaculture, ASC Certified

Origin Type
Farming Method
Operation Type

Corporate Farms

LIFE ON PLANET & NATURAL Impact Dimension	E ON PLANET & NATURAL RESOURCES act Dimension Parameter for Evaluation Assessment Indicators and Metrics Scoring Guidepost						e Comments and Remarks for Assessment
impact billension	raiameter for Evaluation	Asessement mutators and metrics	Negative impact / Critical performance	2 Moderate impact / Acceptable performance	3 Positive impact / Good performance	Score	Comments and remarks for Assessment
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: 4.4kg CO2eq/kg product at final ston
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 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 riks / 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 detersation due to the farming operation after 1999 is therefore deemed to be negligible. Honewer, no active reforestation due to the farming operation after 1999 is therefore deemed to be negligible. Honewer, no active reforestation is conducted on farm level. Within the ASC Feed Standard, indirect deforestation through Feed ingredients addressed and producers must commit to transition to deforestation refered 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	The saline water used for the nursery and grow-out ponds is directly pumped from the surrounding marine environment. Moderate use of fresh water to adjust salinity of water in ponds. 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 continous 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 during grow out
PEOPLE & COASTAL COMMU							The farms are ASC certified and adhere to the social criteria encompassed in the ASC standard. The ASC set
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	social criteria ensures basic social complience along the supply chain but is less thorough than specific social certifications (ex. Fair Trade USA)
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	The farms are ASC certified and adhere to the social criteria encompassed in the ASC standard. The ASC set of social criteria ensures basic social complience along the supply chain but is less thorough than specific social certifications (ex. Fair Trade Use).
Community Inclusiveness	Fair value and participation of communities	Level of involvement of local community in farming and value chain	No / Low	Moderate	High	1	The aquaculture ponds are not managed by a community of small-scale farmers but by a few employees of the owning company. In such setups benefits generated through the farming of shrimps (other than the job creation) are usually shared to a lower degree with the local community but tend to stay within the company.
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 Ining conditions for the shrimp in the respective aquaculture systems are deemed improvable. This is mostly due to the high stocking density. The use of a eration ensures high enough DO levels throughout the water column. However, shrimp ponds shows low habitat structure
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	Moderate risk for stress during rearing due to high stocking density. 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 the ice slurry.