



BIOMAR CHILE'S ASC FEED REPORTS

**Report title
Indicator**

**GHG Emission Report, v1.1
1.21.4**

Instructions

This template is intended for reporting greenhouse gas emissions results to ASC. The Feed Standard does not prescribe a specific standard or set of methods for generating GHG values. However, suppliers should be aware that the development of the Farm Standard requirements may necessitate the application of specific methods for feed emissions in the future.

Emissions can be reported in either or both columns using a biophysical or economic allocation approach. Emissions results must be provided according to scope (1-3) as well as by input/activity, being general feed ingredient categories and additional transport and milling emissions that aren't otherwise captured within ingredients. 'Transport and milling' emissions should be at least equal to the sum of scope 1 and scope 2 emissions. If possible, emissions should also be broken down by category (fossil, biogenic, or land use change), facilitated by certain databases and assessment methods. Any uncategorized emissions should be reported as 'Unspecified emissions' (If feed suppliers are unable to determine emissions by category, the total of all emissions can be reported as unspecified).

*This template is also expected to reflect the resolution of data that feed suppliers will need to provide to farms to satisfy feed-related emissions modeling for the Farm Standard. Feed suppliers should be ready to adjust the composition of ingredients used in calculations to reflect typical compositions of feeds relevant to each producer, whether that is on a producer-level or a general species-level (e.g. average ASC-compliant salmon feed composition), so that relevant emissions estimates are available to aquaculture producers for their own calculations.
Only enter data in blue cells.*

Table 1. Production year

Year of production (yyyy)

2023

Table 2. GHG emissions by scope

GHG emissions per tonne of ASC compliant feed (kg CO₂-eq/t)

Emissions scope

Scope 1
Scope 2
Scope 3

Total

	Biophysical (mass) model	Economic model
Scope 1	90	90
Scope 2	0	0
Scope 3	3.408	1802
Total	3498	1892

Table 3. GHG emissions by category

1,5

Emissions category

Fossil emissions
Biogenic emissions
Land use change emissions
Unspecified emissions

Total

	1,6 Biophysical (mass) model	1,7 Economic model
Fossil emissions	1868	1097
Biogenic emissions	466	28
Land use change emissions	1164	767
Unspecified emissions	0	0
Total	3498	1892

Table 4. GHG emission by Input / Activity

1,8

Input / Activity

Soy crop inputs
Other crop inputs
Reduction fishery inputs
Fishery by-product inputs
Poultry / livestock inputs
Other feed inputs
Transport and milling

Total

	1,9 Quantity (kg/t)	1,11 Biophysical (mass) model	1,12 Economic model
Soy crop inputs	120	532	772
Other crop inputs	466	349	449
Reduction fishery inputs	179	248	223
Fishery by-product inputs	16	9	7
Poultry / livestock inputs	151	2059	105
Other feed inputs	68	132	167
Transport and milling		169	169
Total	1000	3498	1892

Notes

All emissions values must be reported in units of kg CO₂-equivalent per tonne of ASC compliant feed.

Emissions totals for each section should be equivalent.

Total feed input quantity (kg/t) must equal 1000. Use 'Other feed inputs' to make up any difference from 1000 kg. 'Other feed inputs' should also include vitamins, amino acids, and

Transport-related emissions may be difficult to separate from ingredient production and processing emissions, depending on the data source used. Do not include any transport



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REPORT TITLE: SUMMARY OF INGREDIENTS AND PRIMARY RAW MATERIALS
Period: January to May 2024

Ingredient	Origin
Fish Meal	Chile, Argentina, Norway
Fish Oil	Chile, Perú, Japon, Mexico, United States, India, China
Pork Meal	Brazil, France, Spain, Germany
Hemoglobin Powder	Belgium, Brazil, Germany, Poland, UK
Poultry Meal	Brazil, Spain, France, UK, United states
Feather meal	Argentina, Belgium, Brazil, Chile, France, UK, United states
Alga	Brazil
Soy and concentrates	Argentina, Brasil
Sunflower	Bolivia
Groundnut	Argentina
Maize	United states
Wheat adn derivates	Argentina, Chile, United states
Vegetable oils derivates	Argentina
Rapeseed oil	Chile, Paraguay, Uruguay



BIOMAR CHILE'S ASC FEED REPORTS

Report title Due Diligence Pathways and Low Risk Plant Ingredients Report, v1.0

Indicators 2.2.10 and 5.1.12
January to May 2024

Instructions

This template is intended for reporting both a) outcomes of the Due Diligences carried out under Principle 2 and the respective pathways to ASC, and b) an overview of plant ingredients determined to be low risk under Principle 5 and the respective pathways chosen. Reporting is at a UoC level and on an annual basis. The UoC should select the type of assessment (whether ingredient manufacturer or plant/marine primary raw material), noting that 'plant primary raw material 5.1.5' refers to the additional due diligence assessment required under Principle 5 for legal deforestation/conversion. The UoC enters the date the assessment was conducted. The UoC selects the primary raw material assessed (if applicable). If primary raw material is not listed, the UoC enters the common name and latin name. The UoC selects the country of location (ingredient manufacturer) or production (plant primary raw material). For marine primary raw material, the country of the flag state is used (as per pathway 1 Country Score Card), unless pathway 2/3/4 are chosen in which case 'Fishery' is selected as the Country of location. The UoC selects which pathway was chosen to demonstrate low risk for each risk factor (legal, social and environmental). For plant primary raw material 5.1.5 assessments, only the environmental risk factor applies. A new row should be added for each assessment. Only enter data in the blue cells.

Table 1. Total number of assessments

Type of Assessment	Pathway 1	Pathway 2	Pathway 3	Pathway 4	Total
Ingredient Manufacturer (2.2.5)	24	0	0	3	27
Marine Primary Raw Material (2.2.6)	7	0	0	2	9
Plant Primary Raw Material (2.2.6)	6	0	0	0	6

Table 2. Outcomes due diligence pathways and low risk plant ingredients report

	1,1	1,2	1,3	1,4	1,5	1,6	1,7
Type of Assessment	Date of Due Diligence Assessment (yyyy-mm-dd)	Primary Raw Material "common name (latin name)"	Country of location/production (select 'Fishery' if not using Pathway 1 for Marine)	Pathway chosen to demonstrate Low Risk for Legal risk	Pathway chosen to demonstrate Low Risk for Social risk	Pathway chosen to demonstrate Low Risk for Environmental risk	
Ingredient Manufacturer (2.2.5)	2024-06-19	n.a.	Belgium	Pathway 1 - Country Score Card	Pathway 1 - Country Score Card	Pathway 1 - Country Score Card	
Ingredient Manufacturer (2.2.5)	2024-06-19	n.a.	Brazil	Pathway 4 - Certification	Pathway 4 - Certification	Pathway 4 - Certification	
Ingredient Manufacturer (2.2.5)	2024-06-19	n.a.	Chile	Pathway 1 - Country Score Card	Pathway 1 - Country Score Card	Pathway 1 - Country Score Card	
Ingredient Manufacturer (2.2.5)	2024-06-19	n.a.	France	Pathway 1 - Country Score Card	Pathway 1 - Country Score Card	Pathway 1 - Country Score Card	
Ingredient Manufacturer (2.2.5)	2024-06-19	n.a.	Germany	Pathway 1 - Country Score Card	Pathway 1 - Country Score Card	Pathway 1 - Country Score Card	
Ingredient Manufacturer (2.2.5)	2024-06-19	n.a.	Norway	Pathway 1 - Country Score Card	Pathway 1 - Country Score Card	Pathway 1 - Country Score Card	
Ingredient Manufacturer (2.2.5)	2024-06-19	n.a.	Spain	Pathway 1 - Country Score Card	Pathway 1 - Country Score Card	Pathway 1 - Country Score Card	
Ingredient Manufacturer (2.2.5)	2024-06-19	n.a.	United Kingdom	Pathway 1 - Country Score Card	Pathway 1 - Country Score Card	Pathway 1 - Country Score Card	
Ingredient Manufacturer (2.2.5)	2024-06-19	n.a.	United States	Pathway 1 - Country Score Card	Pathway 1 - Country Score Card	Pathway 1 - Country Score Card	
Marine Primary Raw Material (2.2.6)	2024-06-19	Fish meal	Chile	Pathway 1 - Country Score Card	Pathway 1 - Country Score Card	Pathway 4 - Certification	
Marine Primary Raw Material (2.2.6)	2024-06-19	Fish oil	Chile	Pathway 1 - Country Score Card	Pathway 1 - Country Score Card	Pathway 4 - Certification	
Marine Primary Raw Material (2.2.6)	2024-06-19	Krill meal	Norway	Pathway 1 - Country Score Card	Pathway 1 - Country Score Card	Pathway 1 - Country Score Card	
Plant Primary Raw Material (2.2.6)	2024-06-19	Wheat	Chile	Pathway 1 - Country Score Card	Pathway 1 - Country Score Card	Pathway 1 - Country Score Card	
Plant Primary Raw Material (2.2.6)	2024-06-19	Rapeseed	Chile	Pathway 1 - Country Score Card	Pathway 1 - Country Score Card	Pathway 1 - Country Score Card	
Plant Primary Raw Material (5.1.5)	2024-06-19	Wheat	Chile	Pathway 1 - Country Score Card	Pathway 1 - Country Score Card	Pathway 1 - Country Score Card	
Plant Primary Raw Material (5.1.5)	2024-06-19	Rapeseed	Chile	Pathway 1 - Country Score Card	Pathway 1 - Country Score Card	Pathway 1 - Country Score Card	



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Report title	Volume of Marine Ingredients and MSL Report, v1.0
Indicators	4.1.5 and 4.1.6 January to May 2024
Instructions	<p><i>This template is intended for reporting UoC volume of marine ingredients used and majority sustainability level (MSL) to ASC.</i></p> <p><i>For initial audits, the calculation period is the 24 months prior to the initial audit. After initial certification, the calculation period is per calendar year (January to December).</i></p> <p><i>Indicate the volume of whole fish and by-products in metric tonnes, used in aquafeed.</i></p> <p><i>Indicate the volume of whole fish scoring at each category in aquafeed. Note that there may be whole-fish which does not score at any Category.</i></p> <p><i>The MSL is then calculated.</i></p> <p>Only enter data in blue cells.</p>

Table 1. Volume of whole fish, by-products and whole fish by category		
	Volume (metric tonnes)	
All marine	9.153.590	
By-products	2.006.640	Provide the volume of fishery by-products in aquafeed (metric tonne)
Whole fish	7.146.950	Provide the volume of whole fish in aquafeed (metric tonne)
Category 1	25.600	Provide the volume of Category 1 whole fish included in aquafeed (metric tonne)
Category 2	4.860.833	Provide the volume of Category 2 whole fish included in aquafeed (metric tonne)
Category 3	-	Provide the volume of Category 3 whole fish included in aquafeed (metric tonne)
Category 4	2.260.517	Provide the volume of Category 4 whole fish included in aquafeed (metric tonne)
Table 2. Percentage of whole fish marine ingredients per category		
Category	Percentage (%)	
Category 1	0	This is the percentage of whole fish marine ingredients in Category 1
Category 2	68	This is the percentage of whole fish marine ingredients in Category 2
Category 3	0	This is the percentage of whole fish marine ingredients in Category 3
Category 4	32	This is the percentage of whole fish marine ingredients in Category 4
Majority Sustainability Level	Level 2	