



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

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

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

| | 1,8 Quantity (kg/t) | 1,9 Biophysical (mass) model | 1,11 Economic model | 1,12 Economic model |
|----------------------------|------------------------|---------------------------------|------------------------|------------------------|
| Soy crop inputs | 120 | 532 | 772 | 772 |
| Other crop inputs | 466 | 349 | 449 | 449 |
| Reduction fishery inputs | 179 | 248 | 223 | 223 |
| Fishery by-product inputs | 16 | 9 | 7 | 7 |
| Poultry / livestock inputs | 151 | 2059 | 105 | 105 |
| Other feed inputs | 68 | 132 | 167 | 167 |
| Transport and milling | | 169 | 169 | 169 |
| Total | 1000 | 3498 | 1892 | 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