



MarinTrust Standard V2

By-product Fishery Assessment *Cod (Gadus morhua) in Division 5.a (Iceland grounds)*

MarinTrust Programme

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Table 1 Application details and summary of the assessment outcome

| | | |
|---|-----------------------------------|---|
| Fishery Under Assessment | Species: | Cod (<i>Gadus morhua</i>) |
| | Geographical area: | FAO 27 Northeast Atlantic |
| | Country of origin of the product: | Iceland (Flag state) |
| | Stock: | Cod (<i>Gadus morhua</i>) in Division 5.a (Iceland grounds) |
| Date | May 2022 | |
| Report Code | DNK27 | |
| Assessor | Vito Romito | |
| Country of origin of the product - PASS | Iceland (Flag state) | |
| Country of origin of the product - FAIL | | |

| Application details and summary of the assessment outcome | | | |
|---|-------------------|----------------------------|-----------------------------------|
| Company Name(s): Marine Ingredients Denmark; FFSkagen, TripleNine | | | |
| Country: Denmark | | | |
| Email address: | | Applicant Code: | |
| Certification Body Details | | | |
| Name of Certification Body: | | Global Trust Certification | |
| Assessor | Peer Reviewer | Assessment Days | Initial/Surveillance/ Re-approval |
| Vito Romito | Geraldine Criquet | 0.5 | Initial |
| Assessment Period | To May 2022 | | |

| Scope Details | |
|---------------------------------------|--|
| Main Species | Cod |
| Stock | Cod (<i>Gadus morhua</i>) in Division 5.a (Iceland grounds) |
| Fishery Location | FAO 27 Northeast Atlantic, Icelandic waters |
| Management Authority (Country/ State) | Icelandic Ministry of Industries and Innovation (MII) |
| Gear Type(s) | All gear types used in Iceland (trawl, longlines, nets, gillnets, hook and line) |
| Outcome of Assessment | |
| Peer Review Evaluation | Agree with assessor's determination of approval |
| Recommendation | APPROVE |

Table 2. Assessment Determination

| Assessment Determination |
|--|
| <p>If any species is categorised as Endangered or Critically Endangered on IUCN's Red List, or if it appears in the CITES appendices, it cannot be approved for use as Marin Trust raw material. Icelandic cod is neither listed as Endangered or Critically Endangered on IUCN's Red List, nor listed in CITES appendices; therefore, it is eligible for approval for use as Marin Trust by-product raw material.</p> <p>The Icelandic Ministry of Industries and Innovation has a fisheries management plan for Icelandic cod (MII, 2015). In 2015, the plan was extended until 2020. The plan, which aims at providing maximum sustainable yield, has been evaluated by ICES and is considered to be precautionary. ICES advised in 2021 that when the Icelandic management plan is applied, catches in the fishing year 2021/2022 should be no more than 222 373 tonnes.</p> <p>The stock is assessed by ICES and therefore assessed as a Category C here. Catches are accounted in the stock assessment model. ICES assessed in 2021 that fishing pressure on the stock is above HRMSY and below HRpa. Spawning stock size is above MSY B_{trigger}, B_{pa}, and B_{lim}. This stock passes Clause C1.1. and C1.2.</p> <p>Accordingly, this stock is APPROVED for the production of fishmeal and fish oil under the current Marin Trust v 2.0 Standard for by-products.</p> |
| Fishery Assessment Peer Review Comments |
| <p>The assessor correctly classified cod in Division 5.a as Category C, the stock is subject to a specific management regime and reference points are defined.</p> <p>Fishery removals are considered in the stock assessment process. The most recent stock assessment shows that the stock is above MSY B_{trigger}, B_{pa}, and B_{lim}. Therefore, the stock is considered to have a biomass above the limit reference point.</p> <p>Cod in Division 5.a passes both Clauses C1.1 and C1.2 and therefore should be approved under the Marin Trust Standard v.2.</p> |
| Notes for On-site Auditor |
| None. |

Species Categorisation

NB: If any species is categorised as Endangered or Critically Endangered on the IUCN Red List, or if it appears in CITES Appendix 1, it **cannot** be approved for use as a MarinTrust raw material.

IUCN Red list Category

By-product material from a species listed by IUCN (the International Union for Conservation of Nature) under the Red List for the following categories shall immediately fail the assessment;

- EXTINCT (E) AND EXTINCT IN THE WILD (EW)
- CRITICALLY ENDANGERED (CR) facing an extremely high risk of extinction in the wild.
- ENDANGERED (EN) facing a very high risk of extinction in the wild.

By-product material may be used from the following categories provided that all clauses in the MarinTrust standard are passed.

- VULNERABLE (VU) facing a high risk of extinction in the wild.
- NEAR THREATENED (NT) does not qualify for above now, but is close or is likely to qualify for, a threatened category in the near future.
- LEAST CONCERN (LC) Widespread and abundant.
- DATA DEFICIENT (DD) and NOT EVALUATED (NE)

Table 3 Species Categorisation Table

| Common name | Latin name | Stock | Management | Category | IUCN Red List Category ¹ | CITES Appendix 1 ² |
|-------------|---------------------|---|---|----------|-------------------------------------|-------------------------------|
| Cod | <i>Gadus morhua</i> | Cod (<i>Gadus morhua</i>) in Division 5.a (Iceland grounds) | Icelandic Ministry of Industries and Innovation (MII) | C | LC | No |

¹ <https://www.iucnredlist.org/>

² <https://cites.org/eng/app/appendices.php>

CATEGORY C SPECIES

In a by-product assessment, Category C species are those which are subject to a species-specific management regime and are usually targeted species in fisheries for human consumption.

Clause C1 should be completed for each Category C species. If there are no Category C species in the fishery under assessment, this section can be deleted. Where a species fails this Clause, it should be assessed as a Category D species instead.

| Species Name | | Cod (<i>Gadus morhua</i>) in Division 5.a (Iceland grounds) | |
|--|--|--|------|
| C1 | Category C Stock Status - Minimum Requirements | | |
| | C1.1 | Fishery removals of the species in the fishery under assessment are included in the stock assessment process, OR are considered by scientific authorities to be negligible. | Pass |
| | C1.2 | The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible. | Pass |
| Clause outcome: | | | Pass |
| <p>C1.1 Fishery removals of the species in the fishery under assessment are included in the stock assessment process.</p> <p>Icelandic cod is assessed using a separable catch at age model using catches in the assessment and forecast (ICES, 2021). Model inputs include catch-at-age and age-structured data from the Icelandic bottom trawl survey - Spring - Marsrall (G3239 [IS-SMB]), age 1–14) and Autumn - Haustrall (G4493 [IS-SMH]), age 3–13 survey indices. Clause C1.1 is met.</p> <p>C1.2 The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point.</p> <p>ICES assessed in its 2021 advice that fishing pressure on the stock is above HRMSY and below HRpa. Spawning stock size is above MSY Btrigger, Bpa, and Blim, as shown below (Figure 1). Biomass is above the limit reference point and Clause C1.2 is met.</p> | | | |
| <p>Catches</p> | | <p>Recruitment (age 3)</p> | |
| <p>Fishing pressure</p> | | <p>Stock size</p> | |

Figure 1. Cod in Division 5.a. Summary of the stock assessment. Harvest rates are calculated based on biomass age 4+. All biomass reference points refer to SSB levels (2021 ICES Advice).

References

CITES. 2022. Cites Appendix 1. <https://cites.org/eng/app/appendices.php>

Cook, R., Fernandes, P., Florin, A., Lorange, P. & Nedreaas, K. 2015. Gadus morhua. The IUCN Red List of Threatened Species 2015: e.T8784A45097319. Accessed on 18 May 2022

ICES. 2021. Cod (Gadus morhua) in Division 5.a (Iceland grounds). In Report of the ICES Advisory Committee, 2021. ICES Advice 2021, cod.27.5a, https://ices-library.figshare.com/articles/report/Cod_Gadus_morhua_in_Division_5_a_Iceland_grounds_/18638687?backTo=/collections/ICES_Advice_2021/5796932

Links

| | |
|-----------------------------------|---------------|
| MarinTrust Standard clause | 1.3.2.2 |
| FAO CCRF | 7.5.3 |
| GSSI | D.3.04, D5.01 |

CATEGORY D SPECIES

Category D species are those which are not subject to a species-specific management regime. In the case of mixed trawl fisheries, Category D species may make up the majority of landings. The comparative lack of scientific information on the status of the population of the species means that a risk-assessment style approach must be taken.

| | | | |
|--------------------------|---|--|--------------|
| D1 | Species Name | | |
| | Productivity Attribute | | Value |
| | Average age at maturity (years) | | |
| | Average maximum age (years) | | |
| | Fecundity (eggs/spawning) | | |
| | Average maximum size (cm) | | |
| | Average size at maturity (cm) | | |
| | Reproductive strategy | | |
| | Mean trophic level | | |
| | Average Productivity Score | | |
| | Susceptibility Attribute | | Value |
| | Availability (area overlap) | | |
| | Encounterability (the position of the stock/species within the water column relative to the fishing gear) | | |
| | Selectivity of gear type | | |
| | Post-capture mortality | | |
| | Average Susceptibility Score | | |
| | PSA Risk Rating (From Table D3) | | |
| | Compliance rating | | |
| | Further justification for susceptibility scoring (where relevant) <i>For susceptibility attributes, please provide a brief rationale for scoring of parameters where there may be uncertainty affecting your decision</i> | | |
| | References | | |
| Standard clauses 1.3.2.2 | | | |

Table D2 - Productivity / Susceptibility attributes and scores.

| Productivity attributes | Low productivity/ High risk | Medium productivity/ Medium risk | High productivity/ Low risk |
|---------------------------------|---|-------------------------------------|--------------------------------|
| | Score 3 | Score 2 | Score 1 |
| Average age at maturity (years) | >4 | 2 to 4 | <2 |
| Average maximum age (years) | >30 | 10 to 30 | <10 |
| Fecundity (eggs/spawning) | <1 000 | 1 000 to 10 000 | >10 000 |
| Average maximum size (cm) | >150 | 60 to 150 | <60 |
| Average size at maturity (cm) | >150 | 30 to 150 | <30 |
| Reproductive strategy | Live bearer, mouth brooder or significant parental investment | Demersal spawner "berried" | Broadcast spawner |
| Mean trophic level | >3.25 | 2.5–3.25 | <2.5 |

| Susceptibility attributes | | High susceptibility/ High risk | Medium susceptibility/ Medium risk | Low susceptibility/ Low risk |
|---------------------------|--|---|---|--|
| | | Score 3 | Score 2 | Score 1 |
| Availability | 1) Overlap of adult species range with fishery | >50% of stock occurs in the area fished | Between 25% and 50% of the stock occurs in the area fished | <25% of stock occurs in the area fished |
| | 2) Distribution | Only in the country/ fishery | Limited range in the region | Throughout region/ global distribution |
| Encounterability | 1) Habitat | Habitat preference of species make it highly likely to encounter trawl gear (e.g. demersal, muddy/sandy bottom) | Habitat preference of species make it moderately likely to encounter trawl gear (e.g. rocky bottom/reefs) | Depth or distribution of species make it unlikely to encounter trawl gear (e.g. epi-pelagic or meso-pelagic) |
| | 2) Depth range | High overlap with trawl fishing gear (20 to 60 m depth) | Medium overlap with trawl fishing gear (10 to 20 m depth) | Low overlap with trawl fishing gear (0 to 10 m, >70 m depth) |
| Selectivity | | Species >2 times mesh size or up to 4 m length | Species 1 to 2 times mesh size or 4 to 5 m length | Species <mesh size or >5 m length |
| Post capture mortality | | Most dead or retained Trawl tow >3 hours | Alive after net hauled Trawl tow 0.5 to 3 hours | Released alive Trawl tow <0.5 hours |

Note: Availability 2 is only used when there is no information for Availability 1; the most conservative score between Encounterability 1 and 2 is used.

| D3 | | Average Susceptibility Score | | |
|----------------------------|-------------|------------------------------|-------------|----------|
| | | 1 - 1.75 | 1.76 - 2.24 | 2.25 - 3 |
| Average Productivity Score | 1 - 1.75 | PASS | PASS | PASS |
| | 1.76 - 2.24 | PASS | PASS | TABLE D4 |
| | 2.25 - 3 | PASS | TABLE D4 | TABLE D4 |

| D4 Species Name | | | |
|---|---|----------------|--|
| Impacts On Species Categorised as Vulnerable by D1-D3 - Minimum Requirements | | | |
| D4.1 | The potential impacts of the fishery on this species are considered during the management process, and reasonable measures are taken to minimise these impacts. | | |
| D4.2 | There is no substantial evidence that the fishery has a significant negative impact on the species. | | |
| Outcome: | | | |
| Evidence | | | |
| D4.1: The potential impacts of the fishery on this species are considered during the management process, and reasonable measures are taken to minimise these impacts. | | | |
| D4.2 There is no substantial evidence that the fishery has a significant negative impact on the species. | | | |
| References | | | |
| Links | | | |
| MarinTrust Standard clause | | 1.3.2.2, 4.1.4 | |
| FAO CCRF | | 7.5.1 | |
| GSSI | | D.5.01 | |