



## MarinTrust Standard V2

### By-product Fishery Assessment

#### VNM01

### Yellowfin tuna (*Thunnus albacares*)

#### in FAO 77 & 87

### (Eastern Central and Southeast Pacific)

**MarinTrust Programme**

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**Table 1 Application details and summary of the assessment outcome**

Fishery Under Assessment	Species:	Yellowfin tuna ( <i>Thunnus albacares</i> )
	Geographical area:	FAO 77 & 87 (Eastern Central and Southeast Pacific)
	Country of origin of the product:	Vietnam Flag countries: USA, Cook Islands, Tokelau, Fiji, Vanuatu, Samoa, South Korea
	Stock:	Eastern Pacific Ocean (EPO) yellowfin tuna
Date	May 2024	
Report Code	VNM01	
Assessor	Ana Elisa Almeida Ayres	
Country of origin of the product - PASS	Vietnam Flag countries: USA, Cook Islands, Tokelau, Fiji, Vanuatu, Samoa, South Korea	
Country of origin of the product - FAIL	N/A	

Application details and summary of the assessment outcome			
Company Name(s): Thien Quynh Khanh Hoa One Sole Member Limited Liability Company , Thien Quynh Co. Ltd			
Country: Vietnam			
Flag countries: USA, Cook Islands, Tokelau, Fiji, Vanuatu, Samoa, South Korea			
Email address:		Applicant Code:	
Certification Body Details			
Name of Certification Body:		NSF / Global Trust Certification Ltd.	
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/Re-approval
Ana Elisa Almeida Ayres	Matthew Jew	0.5	Surveillance 02
Assessment Period	May 2024 – May 2025		

Scope Details	
Main Species	Yellowfin tuna ( <i>Thunnus albacares</i> )
Stock	Eastern Pacific Ocean (EPO) yellowfin tuna
Fishery Location	FAO 77 & 87 (Eastern Central and Southeast Pacific)
Management Authority (Country/ State)	Inter-American Tropical Tuna Commission (IATTC)
Gear Type(s)	Longlines and purse seines
Outcome of Assessment	
Peer Review Evaluation	Agree with assessor's recommendation
Recommendation	<b>APPROVED</b>

## Table 2. Assessment Determination

Assessment Determination
<p>If any species is categorised as Endangered or Critically Endangered on Union for Conservation of Nature's Red List of Threatened Species - IUCN's Red List, or if it appears in the Convention on International Trade in Endangered Species of Wild Fauna and Flora - CITES appendices, it cannot be approved for use as Marin Trust raw material. <i>Thunnus albacares</i> - yellowfin tuna is not categorised as Endangered or Critically Endangered on IUCN's Red List and does not appear in CITES appendices; therefore, <i>Thunnus albacares</i> - yellowfin is eligible for approval for use as Marin Trust by-product raw material.</p> <p>For assessment and management purposes, two discrete stocks of yellowfin tuna are recognized in the Pacific Ocean differentiated by the 150°W:</p> <ol style="list-style-type: none"> <li>1. Western Central Pacific Ocean (WCPO) yellowfin (west of 150°W), managed via the Western and Central Pacific Fisheries Commission (WCPFC).</li> <li>2. Eastern Pacific Ocean (EPO) yellowfin (east of 150°W), managed by the Inter-American Tropical Tuna Commission (IATTC).</li> </ol> <p>Although the western boundary of FAO area 77 is at 175°W, only one stock may be assessed for each by product report, per MarinTrust guidance. For the purposes of this report, the EPO yellowfin tuna stock was assessed for fishing efforts occurring in FAO Areas 77 &amp; 87. As the EPO stock is managed by IATTC and reference points are defined, this stock is assessed under Category C.</p> <p>Fishery removals are included in the stock assessment and it PASSES Clause C1.1. The stock is considered, in its most recent stock assessment, to have biomass above the limit reference point, it PASSES Clause C1.2.</p> <p>Therefore, Eastern Pacific Ocean (EPO) yellowfin (<i>Thunnus albacares</i>) in FAO 77 and 87 is <b>APPROVED</b> for the production of fishmeal and fish oil under the current MarinTrust v2.3 by-products standard.</p>
Fishery Assessment Peer Review Comments
<p>The assessor correctly classified yellowfin tuna (<i>Thunnus albacares</i>) in FAO 77 and 87 as Category C, the stock is subject to a specific management regime (IATTC).</p> <p>Fishery removals are considered in the stock assessment process. The most recent stock assessment shows that the stock is not considered overfished by IATTC. Therefore, the stock is considered to have biomass above the limit reference point (or proxy).</p> <p>Yellowfin tuna (<i>Thunnus albacares</i>) in FAO 77 and 87 passes both clauses (C1.1 and C1.2) and therefore should be approved under the MarinTrust Standard v.2.3</p>
Notes for On-site Auditor
N/A

## 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 an 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 <sup>1</sup>	CITES Appendix 1 <sup>2</sup>
Yellowfin tuna	<i>Thunnus albacares</i>	Eastern Pacific Ocean (EPO) yellowfin (east of 150°W)	Yes	C	Least Concern <sup>3</sup>	No

<sup>1</sup> <https://www.iucnredlist.org/>

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

<sup>3</sup> <https://www.iucnredlist.org/species/21857/46624561>

## 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		Yellowfin tuna ( <i>Thunnus albacares</i> )	
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

**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.**

The yellowfin tuna stock in the Eastern Pacific Ocean is managed and assessed by the Inter-American Tropical Tunas Commission (IATTC). The last benchmark assessment for yellowfin tuna was conducted in 2020 and followed a risk assessment framework, considered sufficiently reliable to be used as the basis for providing management advice. This framework uses Stock Status Indicators (SSIs), which have become particularly important as supplemental information to, or temporary replacement of formal stock assessments for yellowfin because the staff considered that the results of the assessments at that time were not sufficiently reliable to be used as the basis for its management advice. SSIs are simply time series of raw or lightly processed data for a stock that may reflect trends in abundance or exploitation of that stock. SSIs estimations include quantities such as fishing effort, catch, catch per unit effort, and the size of fish in the catch (IATTC 2023a).

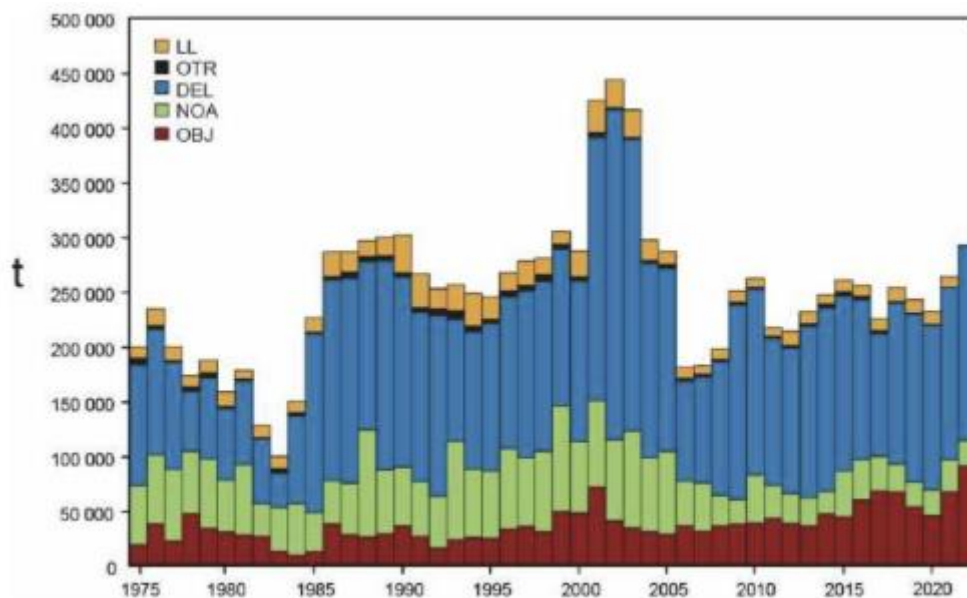


Figure 1. Total catches (retained catches plus discards) for the purse-seine fisheries, by set type (DEL, NOA, OBJ), and retained catches for the longline (LL) and other (OTR) fisheries, of yellowfin tuna in the eastern Pacific Ocean, 1975-2022. The purse-seine catches are adjusted to the species composition estimate obtained from sampling the catches. (IATTC 2023b).

Therefore, fishery removals are incorporated into the stock assessment process, the fishery achieves a PASS against C1.1.

**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.

The results from multiple reference models are combined in a risk analysis to provide management advice. The most recent results published in 2023 indicates that the probability of the spawning biomass being below  $S_{MSY_d}$  is low (12%) and the probability of the spawning biomass exceeding  $S_{LIMIT}$  is zero (IATTC 2023b).

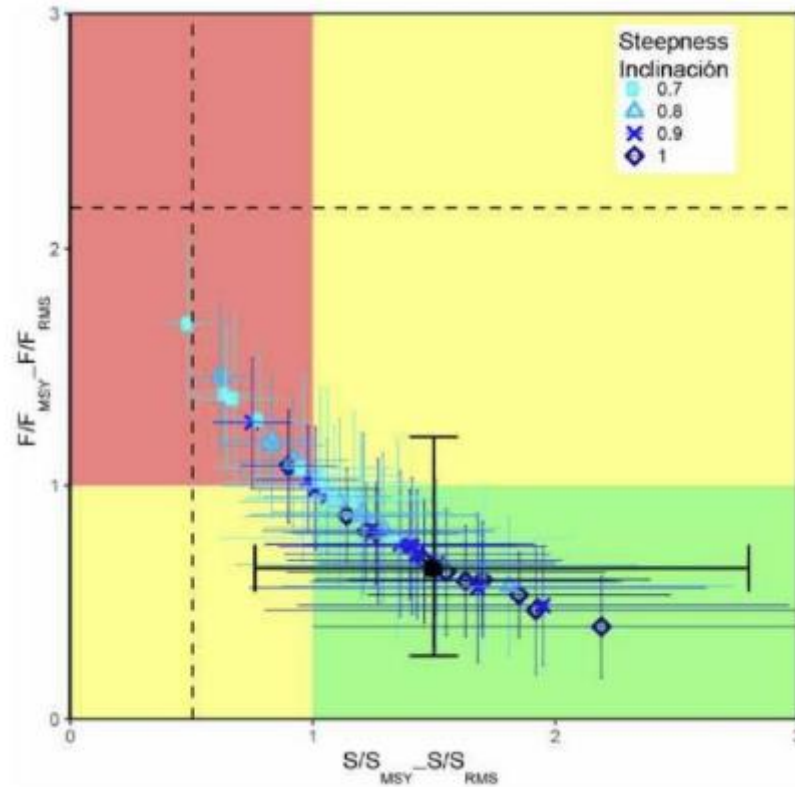


Figure 2 Kobe (phase) plot of the time series of estimates of spawning stock size (S) and fishing mortality (F) of yellowfin tuna relative to their MSY reference points. The colored panels are separated by the target reference points ( $S_{MSY}$  and  $F_{MSY}$ ). Limit reference points (dashed lines), which correspond to a 50% reduction in recruitment from its average unexploited level, based on a conservative steepness ( $h$ ) of 0.75 for the Beverton-Holt stock-recruitment relationship, are merely indicative, since they vary by model and are based on all models combined. The center point for each model indicates the current stock status, based on the average fishing mortality (F) over the last three years; The solid black circle represents all models combined; to be consistent with the probabilistic nature of the risk analysis and the HCR, it is based on  $P(S_{cur}/S_{LIMIT} < x) = 0.5$  and  $P(F_{cur}/F_{MSY} > x) = 0.5$ . The lines around each estimate represent its approximate 95% confidence interval. (IATTC 2023b).

Therefore, the species is considered, in its most recent stock assessment, to have a biomass above the limit reference point, the fishery achieves a PASS against C1.2.

**References**

IATTC (2023a). Stock Status Indicators (SSIs) for tropical tunas in the Eastern Pacific Ocean. Document SAC-14-04. May 2023. [https://www.iattc.org/GetAttachment/663cdcd-f599-4802-b9fd-6611959ff893/SAC-14-04\\_Stock-status-indicators-\(SSIs\)-fortropical-tunas-in-the-EPO.pdf](https://www.iattc.org/GetAttachment/663cdcd-f599-4802-b9fd-6611959ff893/SAC-14-04_Stock-status-indicators-(SSIs)-fortropical-tunas-in-the-EPO.pdf)

IATTC (2023b). The tuna fishery in the Eastern Pacific Ocean in 2022. [https://www.iattc.org/GetAttachment/Of48f889-2aa5-437f8d03-648d62ecfb75/No-21-2023\\_Tunas,-stocks-and-ecosystem-in-the-eastern-Pacific-Ocean-in-2022.pdf](https://www.iattc.org/GetAttachment/Of48f889-2aa5-437f8d03-648d62ecfb75/No-21-2023_Tunas,-stocks-and-ecosystem-in-the-eastern-Pacific-Ocean-in-2022.pdf)

**Links**

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