MarinTrust Standard V2

By-product Fishery Assessment

Skipjack tuna (*Katsuwonus pelamis*) in FAO 77: Eastern Central Pacific Ocean

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Table 1 Application details and summary of the assessment outcome

Fishery Under Assessment	Species:	Skipjack tuna (*Katsuwonus pelamis*)
	Geographical area:	FAO 77 Pacific, Eastern Central
	Country of origin of the product:	Vietnam
	Stock:	Skipjack tuna from FAO 77 Eastern Central Pacific
Date	16 September 2022	
Report Code	THA39	
Assessor	Matthew Jew	
Country of origin of the product - PASS	Thailand (Flag countries: Vietnam)	
Country of origin of the product - FAIL	NA	

Application details and summary of the assessment outcome			
Company Name(s): TCF Co., LTD			
Country: Thailand			
Email address:		Applicant Code:	
Certification Body Details			
Name of Certification Body:		Global Trust Certification	
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/ Re-approval
Matthew Jew	Léa Lebechnech	0.5	Initial
Assessment Period	Up to August 2022		

Scope Details	
Main Species	Skipjack tuna (*Katsuwonus pelamis*)
Stock	Skipjack tuna from FAO 77 Eastern Central Pacific
Fishery Location	FAO 77 Pacific, Eastern Central
Management Authority (Country/ State)	IATTC
Gear Type(s)	Purse Seine, Longline, and Pole-and-Line
Outcome of Assessment	
Peer Review Evaluation	Agree with the assessor's recommendation of approval
Recommendation	APPROVED

Table 2. Assessment Determination

Assessment Determination
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. Skipjack tuna (*Katsuwonus pelamis*) do not appear as Endangered or Critically Endangered on IUCN's Red List, nor do they appear in CITES appendices; therefore, *Katsuwonus pelamis* is eligible for approval for use as Marin trust by-product raw material. The most recent stock assessment for eastern Pacific skipjack tuna was conducted in 2021. The assessment considers skipjack tuna in the eastern Pacific Ocean (including FAO area 77) to be a single stock and this is the only stock under assessment. The stock is subject to a specific management regime (IATTC), therefore it was assessed under Category C. 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. Therefore, skipjack tuna in FAO 77 (Eastern Pacific, Central) is **APPROVED** for the production of fishmeal and fish oil under the current MarinTrust v2.0 by-products.
Fishery Assessment Peer Review Comments
The internal peer reviewer agrees with the assessor's determination, who correctly classified the stock of skipjack tuna in the Eastern Pacific Ocean under Category C, as the stock is subject to a specific management regime in place and reference points are defined. Fishery removals are included in the stock assessment and the stock has its biomass above reference point, so it passes Clauses C1.1 and C1.2. Therefore, skipjack tuna from FAO 77 Eastern Central Pacific, is **APPROVED** for the production of fishmeal and fish oil under the current MarinTrust v 2.0 by-products standards.
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[1]	CITES Appendix 1[2]
Skipjack tuna	*Katsuwonus pelamis*	Skipjack tuna in FAO 77	IATTC	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	**Skipjack tuna (*Katsuwonus pelamis*)**	
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.	Yes
	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.	Yes
	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.

An integrated statistical age-structured catch-at-length stock assessment was developed for skipjack tuna in the Eastern Pacific Ocean using Stock Synthesis (SS3). Although the assessment is termed 'interim', it is considered to be reliable for management advice. Stock Synthesis uses fishing mortality in the model and forecast. Recent commercial catches from 2000-2021 are presented in Figure 1.

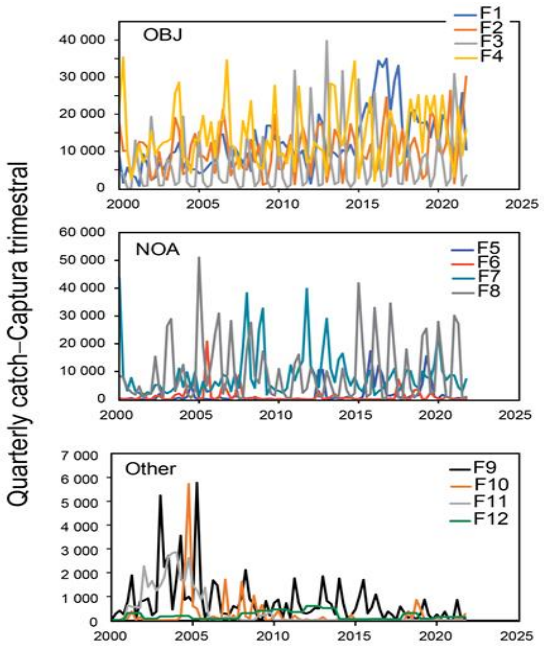

Figure 1. Quarterly catches of skipjack tuna, in tons, in the EPO, 2000-2021, by fishery. NOTE: The y-axis scale varies by plot. Source: Maunder et al. 2022.

Therefore, fishery removals of the stock, including from the fishery under assessment, are included in the stock assessment process. The stock PASSES Clause 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.

Resolution C-16-02 defines target and limit reference points (for spawning biomass, S, and fishing mortality, F) for skipjack tuna in the Eastern Pacific. The current spawning biomass is considered to be above the limit reference point (Figure 2). Furthermore, the current fishing mortality is lower than that corresponding to the biomass target for the reference model (Figure 3).

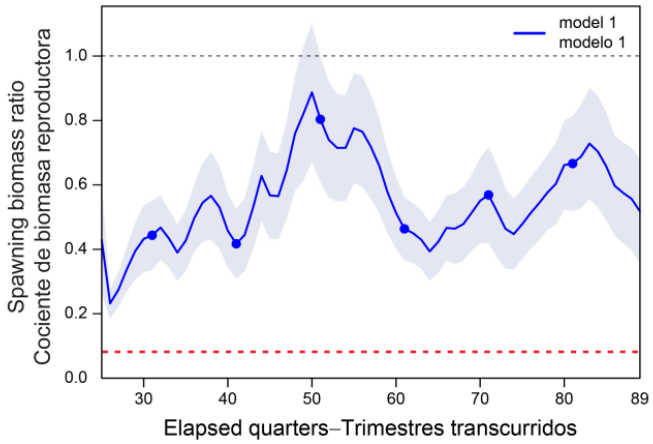

Figure 2. Spawning Biomass Ration (SBR) (with 95% confidence intervals) for skipjack tuna in the eastern Pacific Ocean from 2006 – 2011 estimated by the reference model. The red dashed line (at 0.077) represents the limit reference point (S_{Limit}). Source: Maunder et al. 2022.

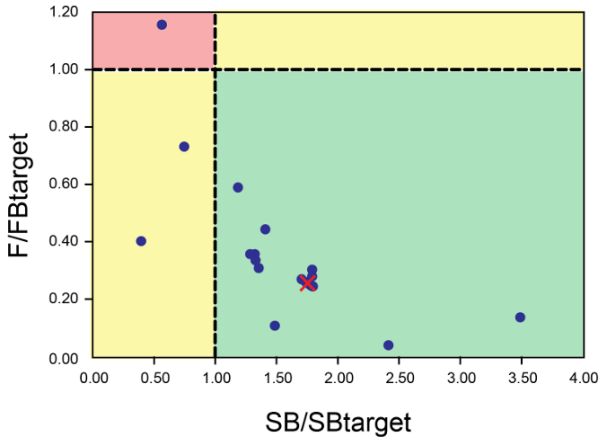

Figure 3. Kobe plot showing the stock status estimates from all the models. Source: Maunder et al. 2022.

Therefore, the stock is considered, in its most recent stock assessment, to have biomass above the limit reference point. The stock PASSES Clause C1.2.

References

Maunder M.N., X. Haikun, C. Minte-Vera, J.L. Valero, C.E. Lennert-Cody, A. Aires-da-Silva. 2022. Document SAC-13-07: Skipjack Tuna in the Eastern Pacific Ocean, 2021: Interim Assessment. IATTC 13 Meeting Scientific Advisory Committee. 16-20 May 2022: https://www.iattc.org/getattachment/0acfc999-fbcd-4b07-9e8d-fc5f85fd88e8/SAC-13-07_Skipjack-tuna-interim-assessment-2022.pdf.

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