By-Product assessment report

BP022

Thai Union Ingredients Co. Ltd.

Report code	BP022	Date of issue	May 2026

1. Application details		
Applicant	Thai Union Ingredients Co. Ltd.	
Applicant country	Thailand	
2. Certification Body details		
Name of Certification Body (CB)	Global Trust Certification	
Contact information for CB	fisheries@nsf.org	
Assessor name	Sam Peacock	
CB internal peer reviewer name	Matthew Jew	
Internal peer review evaluation	Agree with evaluation	
Number of Assessment days	0.2	
Comments on the assessment	This assessment covers 13 byproducts from 4 species. None of the species qualifies as an ETP species per the MT definition. 4 byproducts are sourced exclusively from Medium-Risk flag states, and can be Approved source with caution without a Step 3 assessment. The remaining 9 byproducts represent 10 fish stocks, all of which passed the Category C assessment. The applicant was also able to provide all KDE data for all Step 3 byproducts. Therefore, the remining byproducts are also Approved source with caution.	
3. Approval validity	Valid from 05/2026	Valid until 05/2027
4. Assessment cycle	Re-Approval	

5. By-product assessment outcomes			
By-product species name	**Flag country(ies)**	**Fishing Areas**	**MarinTrust approval status**
Skipjack tuna, *Katsuwonus pelamis*	Maldives, Seychelles, Spain, Malaysia, Mauritius, France, Indonesia	FAO 51, 57	Approved source with caution
Skipjack tuna, *Katsuwonus pelamis*	Japan	FAO 61	Approved source with caution
Skipjack tuna, *Katsuwonus pelamis*	Micronesia, Indonesia, Kiribati, Nauru, Papua New Guinea, Philippines, South Korea, Taiwan, Tuvalu, Vanuatu, China, Japan, Solomon Islands, USA	FAO 71	Approved source with caution
Skipjack tuna, *Katsuwonus pelamis*	Micronesia, Kiribati, Nauru, South Korea, USA, Spain, Taiwan, Tuvalu, Vanuatu	FAO 77	Approved source with caution
Yellowfin tuna, *Thunnus albacares*	France, Seychelles, Spain, Mauritius	FAO 51	Approved source with caution
Yellowfin tuna, *Thunnus albacares*	Kiribati, Nauru, Papua New Guinea, Philippines, South Korea, Taiwan, Tuvalu, Vanuatu, Marshall Islands, Solomon Islands, USA	FAO 71	Approved source with caution
Yellowfin tuna, *Thunnus albacares*	Kiribati, USA, Micronesia, South Korea, Federated States of Micronesia, Tuvalu, Spain, Kiribati, Nauru, Taiwan	FAO 77	Approved source with caution
Albacore tuna, *Thunnus alalunga*	Malaysia, Taiwan, Indonesia	FAO 51, 57	Approved source with caution

Albacore tuna, *Thunnus alalunga*	Japan	FAO 61	Approved source with caution
Albacore tuna, *Thunnus alalunga*	China, Taiwan	FAO 77	Approved source with caution
Bigeye tuna, *Thunnus obesus*	France, Mauritius	FAO 51	Approved source with caution
Bigeye tuna, *Thunnus obesus*	Micronesia, Japan, Kiribati, Nauru, Taiwan, Tuvalu, Micronesia, Kiribati, Nauru, Philippines, South Korea, Taiwan, Tuvalu, USA, Vanuatu, Marshall Islands, Solomon Islands	FAO 71	Approved source with caution
Bigeye tuna, *Thunnus obesus*	Vanuatu, South Korea, USA, Nauru, Taiwan	FAO 77	Approved source with caution

Guidance for on-site auditor
For the audit, the auditor will check how the facility manages by-products deemed medium risk. Any by-products downrated from high to medium risk will require additional due diligence checks.

It is important that facilities check all raw materials from and verify their suppliers especially if there is a perceived risk of sourcing from known or suspected IUU fishing activity. This requires checking supplier records or procedures in place to understand how the supplier can ensure there is no IUU in the raw material they provide. For raw materials risk rated medium, additional or more frequent checks may be required until the facility is certain that the raw materials are not from IUU fishing activity.

The audit requirements are covered in clause 2.11.3 of the MarinTrust Global Standard for Responsible Supply of Marine Ingredients (the MarinTrust Standard) and associated interpretation guidance.

Approved by-products

- No further checks are required beyond those included in the MarinTrust Standard.

Additional checks of Approved Source with Caution by-products

- Review supplier records or procedures in place.

Additional checks of by-products Approved Source with Caution via Step 3 assessment

- In addition to checks for medium risk Approved Source with Caution by-products, by-products that have had risk downgraded from high to medium at Step 3 (use **Appendix 1** to identify these by-product species), confirm that the relevant traceability information continues to be collected for this by-product. During the audit, a traceability check on any by-products downgraded from high to medium risk shall be included as part of the required traceability checks (Section 4).

Guidance for the applicant/certificate holder
The applicant/certificate holder is responsible for ensuring the relevant actions are taken to comply with the MarinTrust Standard.
The certificate holder is responsible for communicating any changes to the by-products sourced by submitting a scope extension request through the MarinTrust online Application Portal.

Appendix 1 – assessment outcomes

Step 2 Assessment Outcomes

By-product species name	Flag country(ies)	IUCN Red List	CITES Appendices	Step 2 risk status	Step 3 required
Skipjack tuna, *Katsuwonus pelamis*	Maldives, Seychelles, Spain, Malaysia, Mauritius, France, Indonesia	Least concern	Not listed	High risk	Yes
Skipjack tuna, *Katsuwonus pelamis*	Japan	Least Concern	Not listed	Medium risk	No
Skipjack tuna, *Katsuwonus pelamis*	Micronesia, Indonesia, Kiribati, Nauru, Papua New Guinea, Philippines, South Korea, Taiwan, Tuvalu, Vanuatu, China, Japan, Solomon Islands, USA	Least Concern	Not listed	High risk	Yes
Skipjack tuna, *Katsuwonus pelamis*	Micronesia, Kiribati, Nauru, South Korea, USA, Spain, Taiwan, Tuvalu, Vanuatu	Least Concern	Not listed	High risk	Yes
Yellowfin tuna, *Thunnus albacares*	France, Seychelles, Spain, Mauritius	Least Concern	Not listed	Medium risk	No
Yellowfin tuna, *Thunnus albacares*	Kiribati, Nauru, Papua New Guinea, Philippines, South Korea, Taiwan, Tuvalu, Vanuatu, Marshall Islands, Solomon Islands, USA	Least Concern	Not listed	High risk	Yes

Yellowfin tuna, *Thunnus albacares*	Kiribati, USA, Micronesia, South Korea, Federated States of Micronesia, Tuvalu, Spain, Kiribati, Nauru, Taiwan	Least Concern	Not listed	High risk	Yes
Albacore tuna, *Thunnus alalunga*	Malaysia, Taiwan, Indonesia	Least Concern	Not listed	High risk	Yes
Albacore tuna, *Thunnus alalunga*	Japan	Least Concern	Not listed	Medium risk	No
Albacore tuna, *Thunnus alalunga*	China, Taiwan	Least Concern	Not listed	High risk	Yes
Bigeye tuna, *Thunnus obesus*	France, Mauritius	Vulnerable	Not listed	Medium risk	No
Bigeye tuna, *Thunnus obesus*	Micronesia, Japan, Kiribati, Nauru, Taiwan, Tuvalu, Micronesia, Kiribati, Nauru, Philippines, South Korea, Taiwan, Tuvalu, USA, Vanuatu, Marshall Islands, Solomon Islands	Vulnerable	Not listed	High risk	Yes
Bigeye tuna, *Thunnus obesus*	Vanuatu, South Korea, USA, Nauru, Taiwan	Vulnerable	Not listed	High risk	Yes

Step 3 Assessment Outcomes

By-product species name	Flag country(ies)	Fishing Area	Stock name	Category C Assessment Outcome	Traceability information	Step 3 Risk Outcome
Skipjack tuna, *Katsuwonus pelamis*	Maldives, Seychelles, Spain, Malaysia, Mauritius, France, Indonesia	FAO 51, 57	Indian Ocean Skipjack	Pass	Path 1 - Yes	Risk downgraded to medium risk
Skipjack tuna, *Katsuwonus pelamis*	Micronesia, Indonesia, Kiribati, Nauru, Papua New Guinea, Philippines, South Korea, Taiwan, Tuvalu, Vanuatu, China, Japan, Solomon Islands, USA	FAO 71	West Pacific skipjack	Pass	Path 1 - Yes	Risk downgraded to medium risk
Skipjack tuna, *Katsuwonus pelamis*	Micronesia, Kiribati, Nauru, South Korea, USA, Spain, Taiwan, Tuvalu, Vanuatu	FAO 77	East Pacific Skipjack	Pass	Path 1 - Yes	Risk downgraded to medium risk
Yellowfin tuna, *Thunnus albacares*	Kiribati, Nauru, Papua New Guinea, Philippines, South Korea, Taiwan, Tuvalu, Vanuatu, Marshall Islands, Solomon Islands, USA	FAO 71	Western and Central Pacific yellowfin	Pass	Path 1 - Yes	Risk downgraded to medium risk
Yellowfin tuna, *Thunnus albacares*	Kiribati, USA, Micronesia, South Korea, Federated States of Micronesia, Tuvalu, Spain, Kiribati, Nauru, Taiwan	FAO 77	Eastern Pacific yellowfin	Pass	Path 1 - Yes	Risk downgraded to medium risk

Albacore tuna, *Thunnus alalunga*	Malaysia, Taiwan, Indonesia	FAO 51	Indian Ocean albacore	Pass	Path 1 - Yes	Risk downgraded to medium risk
Albacore tuna, *Thunnus alalunga*	China, Taiwan	FAO 77	North and South Pacific albacore	Pass	Path 1 - Yes	Risk downgraded to medium risk
Bigeye tuna, *Thunnus obesus*	Micronesia, Japan, Kiribati, Nauru, Taiwan, Tuvalu, Micronesia, Kiribati, Nauru, Philippines, South Korea, Taiwan, Tuvalu, USA, Vanuatu, Marshall Islands, Solomon Islands	FAO 71	Western and Central Pacific bigeye	Pass	Path 1 - Yes	Risk downgraded to medium risk
Bigeye tuna, *Thunnus obesus*	Vanuatu, South Korea, USA, Nauru, Taiwan	FAO 77	Eastern Pacific bigeye	Pass	Path 1 - Yes	Risk downgraded to medium risk
Comments on Step 3 Assessment:						

Appendix 2 – detailed assessment outcomes

(step 2 and step 3 if applicable)

Step 2 outcomes

Flag state	Risk rating	Flag score	Port score	General score	Flag State is contracting party or cooperating non-contracting party to all relevant RFMOs	'Carded' under EU Carding system	Flag state party to PSMA	Flag state mandatory vessel tracking for commercial seagoing fleet	WGI Governance rank
Maldives	High	2.25	1.67	2.13	1	1	1	1	26.89%
Seychelles	Medium	1.79	2.39	1.57	1	1	1	1	62.26%
Spain	Medium	3.21	3.39	2.03	1	1	1	1	75.94%
Malaysia	High	1.96	2.89	2.13	1	1	5	1	72.64%
Mauritius	Medium	2.13	2.72	1.97	1	1	1	1	84.43%
France	Medium	3.17	2.39	1.67	1	1	1	1	85.38%
Indonesia	Medium	3.33	2.56	2.47	1	1	1	1	59.43%
Japan	Medium	2.92	2.06	1.93	1	1	1	1	91.51%
Micronesia (FS of)	High	1.92	2.94	1.93	1	1	5	1	31.13%
Kiribati	High	1.79	3.11	1.96	1	1	5	1	42.92%
Nauru	Medium	2.04	1	1.64	1	1		1	53.30%
Papua New Guinea	High	2.04	2.94	2.07	1	1	5	1	26.42%

Philippines	Medium	2.04	2.06	2.53	1	1	1	1	53.77%
Korea (Rep. South)	Medium	3.67	3.11	1.97	1	1	1	1	83.96%
Taiwan	High	4.17	3.06	2.27	1	1	5	1	90.57%
Tuvalu	High	1.67	2.67	1.81	1	1	5	1	47.64%
Vanuatu	High	2.88	1.56	2.17	2	1	1	1	48.58%
China	High	4.21	4.33	3.2	1	1	5	1	36.79%
Solomon Isl.	High	1.58	3.28	2.07	1	1	5	1	21.70%
USA	Medium	2.29	3	2.37	1	1	1	1	91.04%
Marshall Isl.	High	1.79	3.17	1.89	1	1	5	1	37.74%

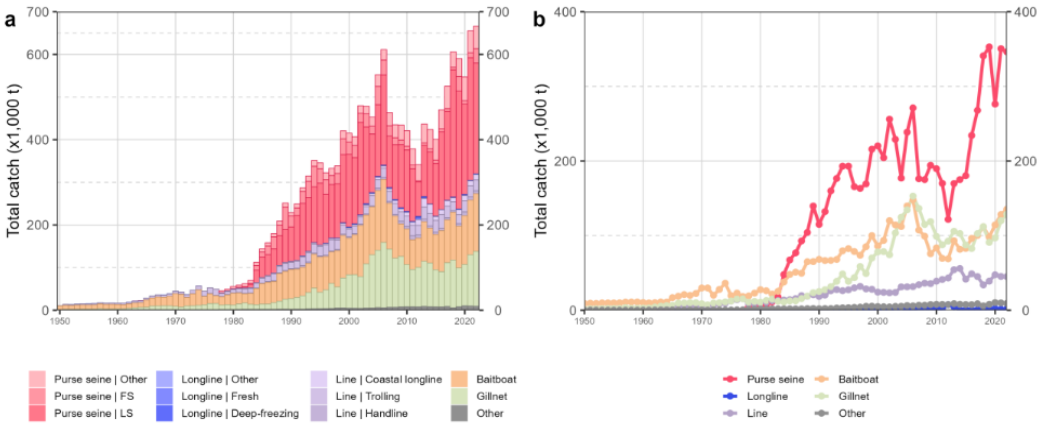
Step 3 outcomes

Category C assessment

Species name		***Katsuwonus pelamis* - Skipjack tuna**	
Fishing area and stock		**Indian Ocean skipjack**	
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 stock assessment conducted by the Indian Ocean Tuna Commission (IOTC) takes all fishery removals into account. The most recent assessment was conducted in 2023. Landings in recent years were reported as a total catch in 2022 of 666,408t, and an average catch 2018-2022 of 613,061t (IOTC 2024). Full catch datasets, including catch and effort by month, species, gear, and vessels flag, and size-frequency datasets, are made available on the IOTC website (IOTC 2025). Catches are shown in the charts below. C1.1 is met.

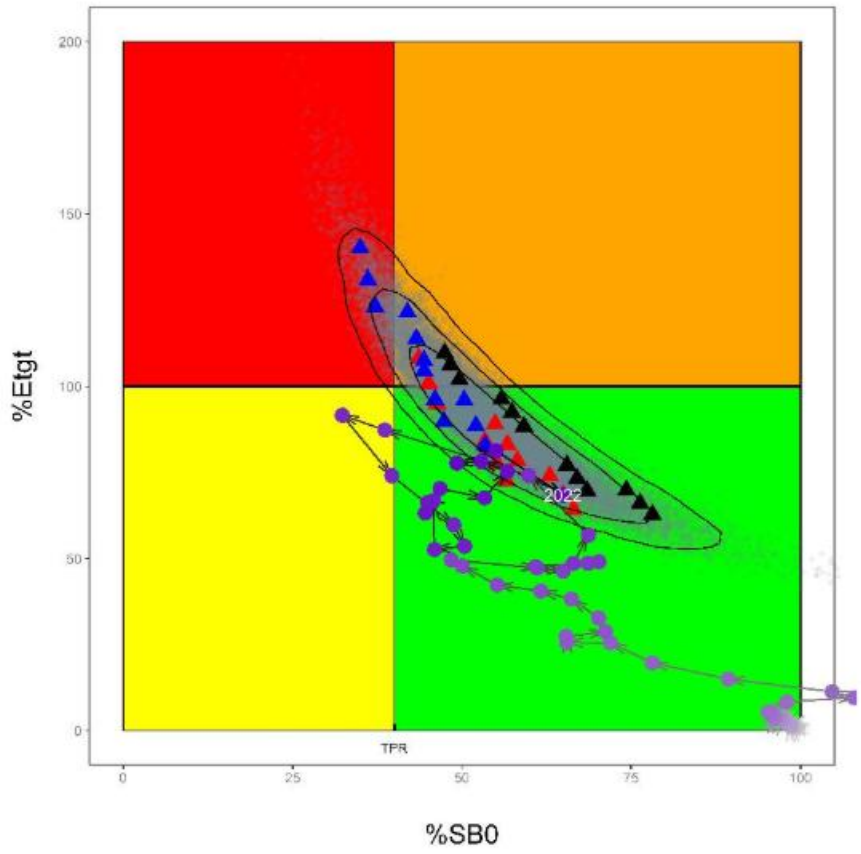


Annual time series of (a) cumulative nominal catches (metric tonnes; t) by fishery and (b) individual nominal catches (metric tonnes; t) by fishery group for Indian Ocean skipjack tuna during 1950-2022 (IOTC 2025)

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 most recent stock assessment was carried out in 2023, as reported in a 2025 stock status report published by the IOTC (IOTC 2025). The stock assessment conclusion states that "The outcome of the 2023 stock assessment model is more optimistic than the previous assessment (2020) despite the high catches recorded in the period 2021-2022, which exceeded the catch limits established in 2020 for this period" (IOTC 2025).

Biomass was estimated to be around 53% of the unfished level, which is above $SB_{MSY.}$ The IOTC also notes that "Over the history of the fishery, biomass has been well above the adopted limit reference point ($20\%SB_0$)" (IOTC 2025). A Kobe plot summarising the outcomes of the most recent stock assessment is provided below. C1.2 is met.



Indian Ocean skipjack tuna, Kobe plot of the 2023 stock assessment. Triangles represent outputs from individual models, grey dots represent uncertainty from individual models (IOTC 2025).

References

IOTC (2025). Indian Ocean Skipjack Tuna Stock Status: Executive Summary. https://iotc.org/sites/default/files/content/Stock_status/2025/English/IOTC-2025-SC28-ES03_SKJE.pdf

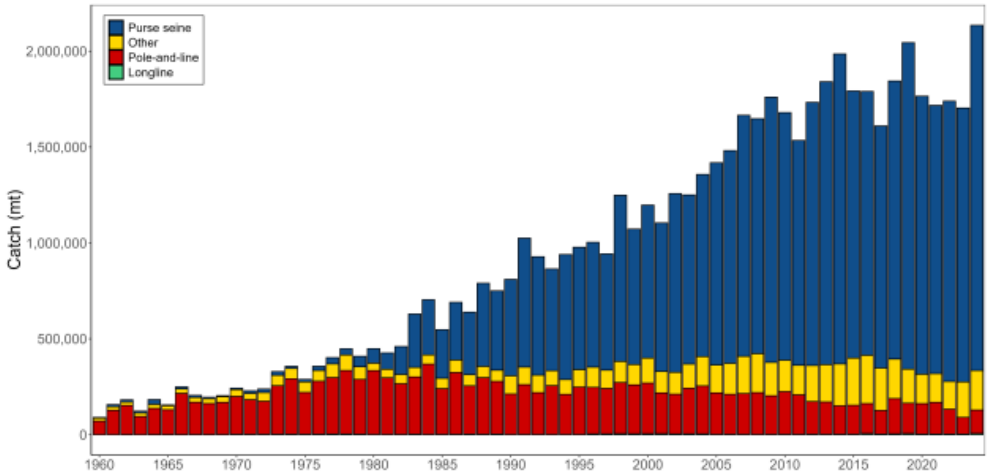
IOTC (2025). Available datasets. https://www.iotc.org/data/datasets

Species name	*Katsuwonus pelamis* - Skipjack tuna	
Fishing area and stock	West Pacific skipjack	
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.

WCPO skipjack tuna is subjected to regular stock assessments by the WCPFC. The most recent of these was carried out in 2025, using data up to the end of 2024. The assessment incorporated catch, effort- and length-frequency estimates, and tag-recapture data (WCPFC 2025). The stock assessment report does not raise major concerns about uncertainties due to lack of data.

Catches are presented in the figure below. C1.1 is met.

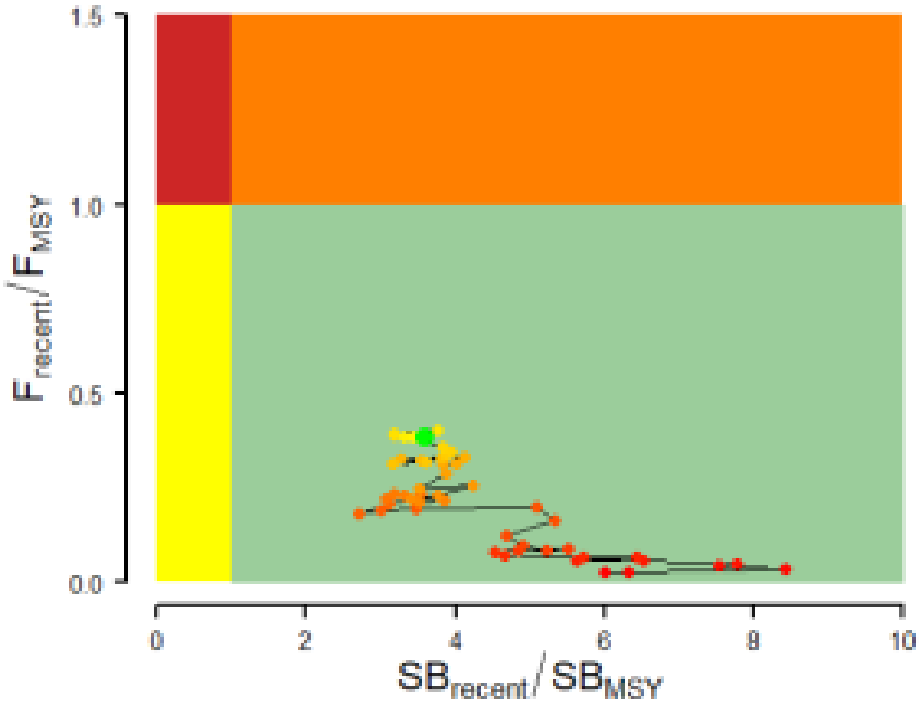


Annual catches of skipjack by gear type in the WCPO area covered by the stock assessment (WCPFC 2025a).

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 2025 stock assessment for WCPO skipjack concluded that "Overall, the outcomes of this assessment suggest that the skipjack stock in the WCPO is not overfished nor undergoing overfishing" (WCPFC 2025). SB_{RECENT}/SB_{MSY} was estimated to be 3.90, with an 80% CI of 2.95 – 5.61,

suggesting biomass is highly likely to be above the MSY level. A Kobe plot illustrating current stock status is shown below. C1.2 is met.



Kobe plot summarising the results for the dynamic MSY analysis of WCPO skipjack by the 2025 stock assessment. Dot colours go from red to green over time, with the green dot being the most recent SB estimate (WCPFC 2025).

References

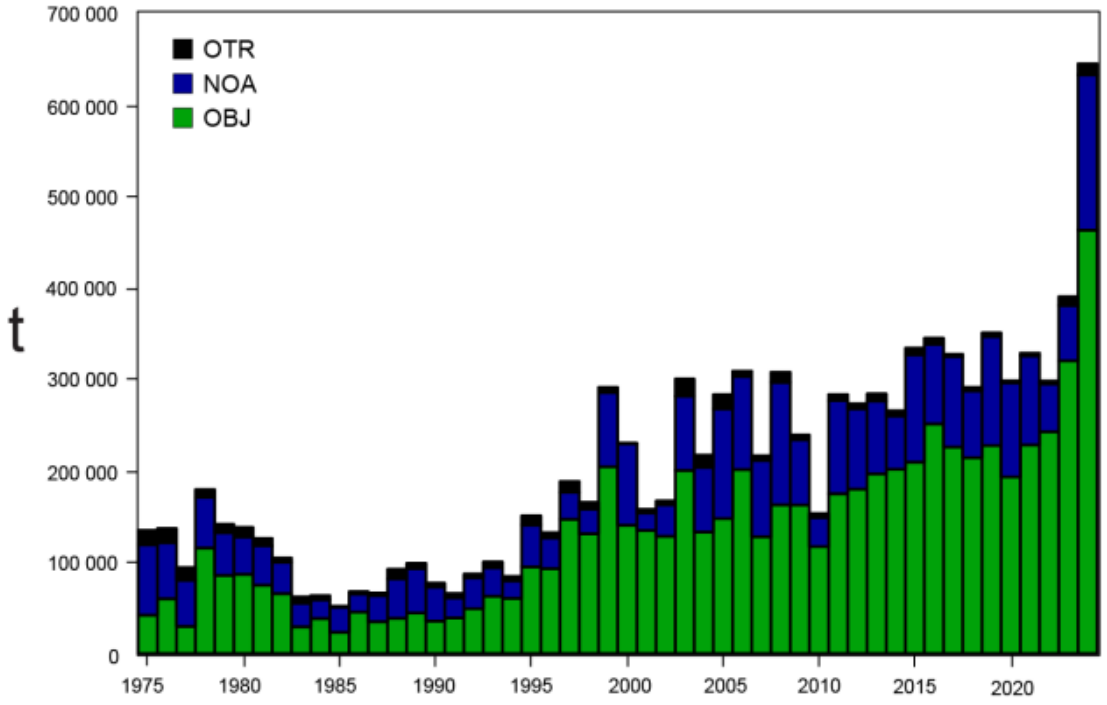
WCPFC (2025). WCPO skipjack tuna stock assessment 2025. https://meetings.wcpfc.int/node/26679

WCPFC (2025a). Overview of tuna fisheries in the Western and Central Pacific Ocean, including economic conditions – 2024. https://meetings.wcpfc.int/node/26697

Species name	*Katsuwonus pelamis* - Skipjack tuna	
Fishing area and stock	East Pacific skipjack	
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.

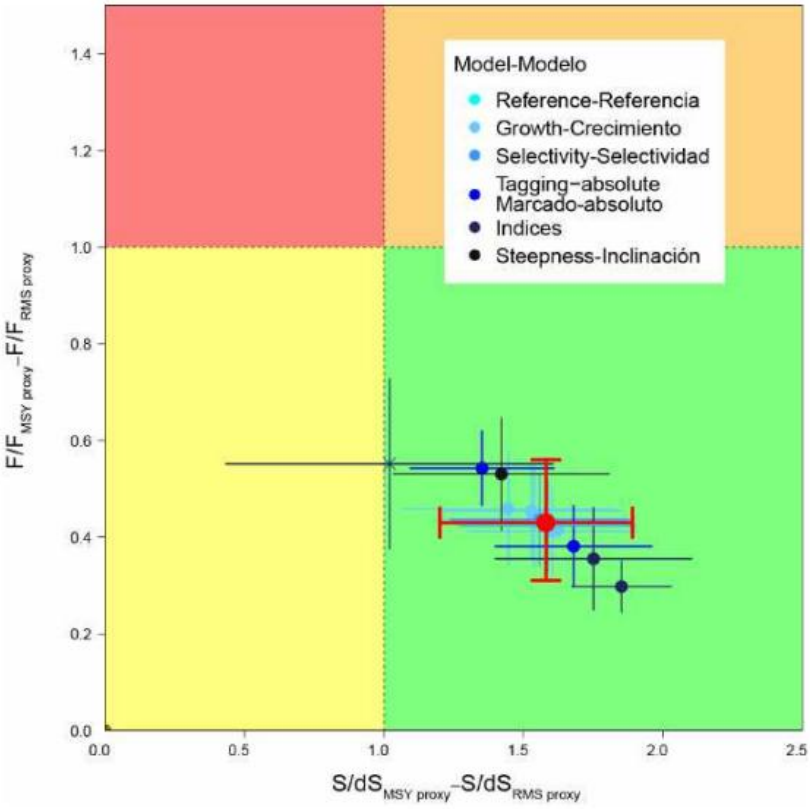
EPO skipjack has historically been subject to "interim" integrated statistical age-structured catch-at-length stock assessments carried out by the IATTC. In 2023, a benchmark stock assessment was conducted using an integrated statistical age-structured catch-at-length model in Stock Synthesis, which is considered by the IATTC to represent "a significant improvement from the initial interim assessment conducted in 2022" (IATTC 2025). The assessment incorporates all available data from across the EPO, including catch data but also size and age frequency data and other sources. Catches in the fishery are shown in the chart below. C1.1 is met.



Skipjack catches (retained plus discards) in the EPO, 1975-2023, by gear type (IATTC 2025).

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.

MSY-based estimates and reference points cannot be estimated for EPO Skipjack due to the nature of the model used. Instead, the IATTC management process utilises a conservative proxy for target biomass of SBR = 0.3, with the fishing mortality corresponding to that target biomass used as the target reference point for fishing mortality (IATTC 2025). The reference model and most of the sensitivity analyses conducted in 2023 indicated that biomass is above the target reference point and fishing mortality is below the target level. None of the model scenarios concluded that stock biomass is below the limit reference point level. A Kobe chart summarising the current stock status is shown below. C1.2 is met.



Kobe plot for skipjack tuna in the EPO (IATTC 2025).

References

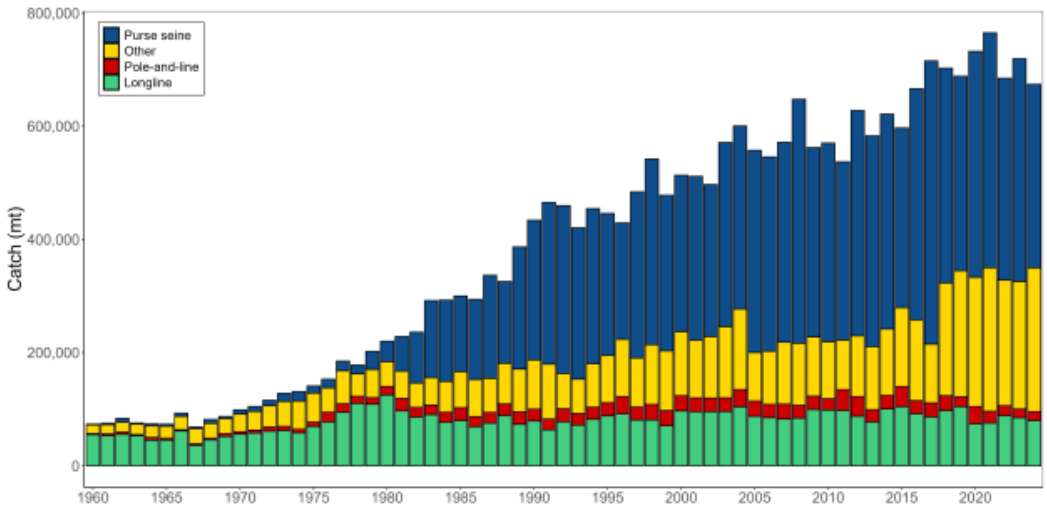
IATTC (2025). The tuna fishery in the Eastern Pacific Ocean in 2024. https://www.iattc.org/GetAttachment/02c5d8e6-6d9b-42b3-a943-a6873f75deac/No-23-2025_The-tuna-fishery-in-the-Eastern-Pacific-Ocean-in-2024_EN.pdf

Species name		***Thunnus albacares* -Yellowfin Tuna**	
Fishing area and stock		**Western and Central Pacific yellowfin**	
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.

Western and Central Pacific Ocean (WCPO) yellowfin tuna is subject to regular stock assessments by the Western and Central Pacific Fisheries Commission (WCPFC). The most recent stock assessment was conducted in 2023 and utilised all available catch data, as summarised in the graph below. 54 models were used to provide a range of potential outcomes based on different key variables, a process which reduces the inherent level of uncertainty.

Catches are presented in the figure below. C1.1 is met.



WCPO yellowfin catch by gear (WCPFC 2025).

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 2023 stock assessment produced a series of estimates of the current status of the stock relative to the target reference point BMSY. Biomass in 2021 was estimated to be between 1.91 and 3.11

times larger than BMSY with an 80% certainty; none of the model results indicated that biomass was below BMSY. Biomass is estimated by the most recent stock assessment to be above the target reference point with a high degree of certainty, and therefore also above any potential limit reference point (WCPFC 2023). A Kobe plot showing current stock status is provided below. C1.2 is met.

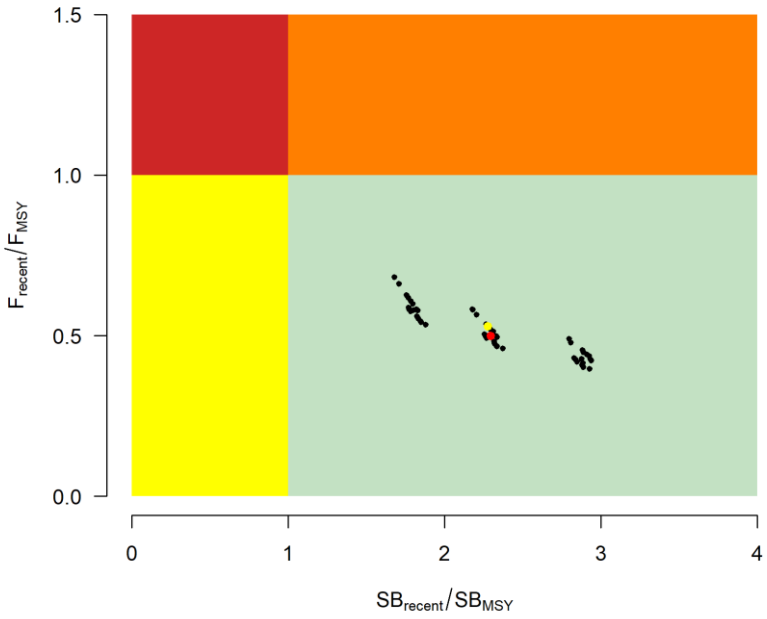


Figure 1. WCPO yellowfin tuna, Kobe plot summarising the results of each of the stock assessment models. The yellow dot is the 2023 diagnostic model and the red dot is the median (WCPFC 2023).

References

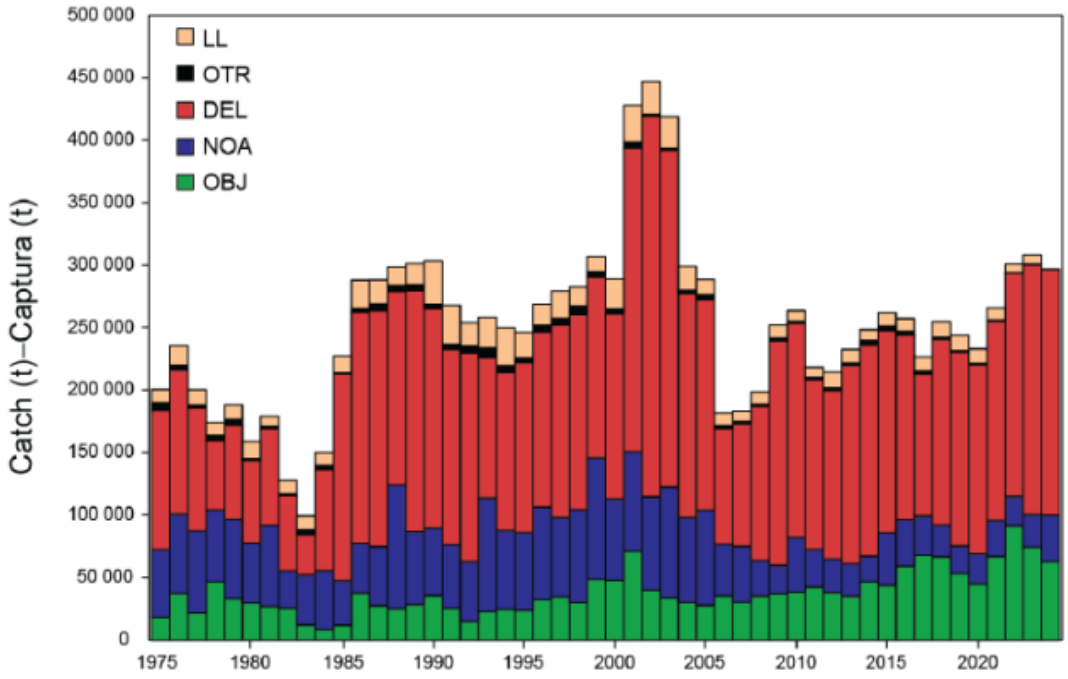
WCPFC (2023). WCPO Yellowfin Tuna, Stock Status and Management Advice. https://www.wcpfc.int/file/1008665/download?token=wFUhc7q7tern

WCPFC (2025). Overview of tuna fisheries in the Western and Central Pacific Ocean, including economic conditions – 2024. https://meetings.wcpfc.int/node/26697

Species name		***Thunnus albacares* -Yellowfin Tuna**	
Fishing area and stock		**East Pacific yellowfin**	
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.

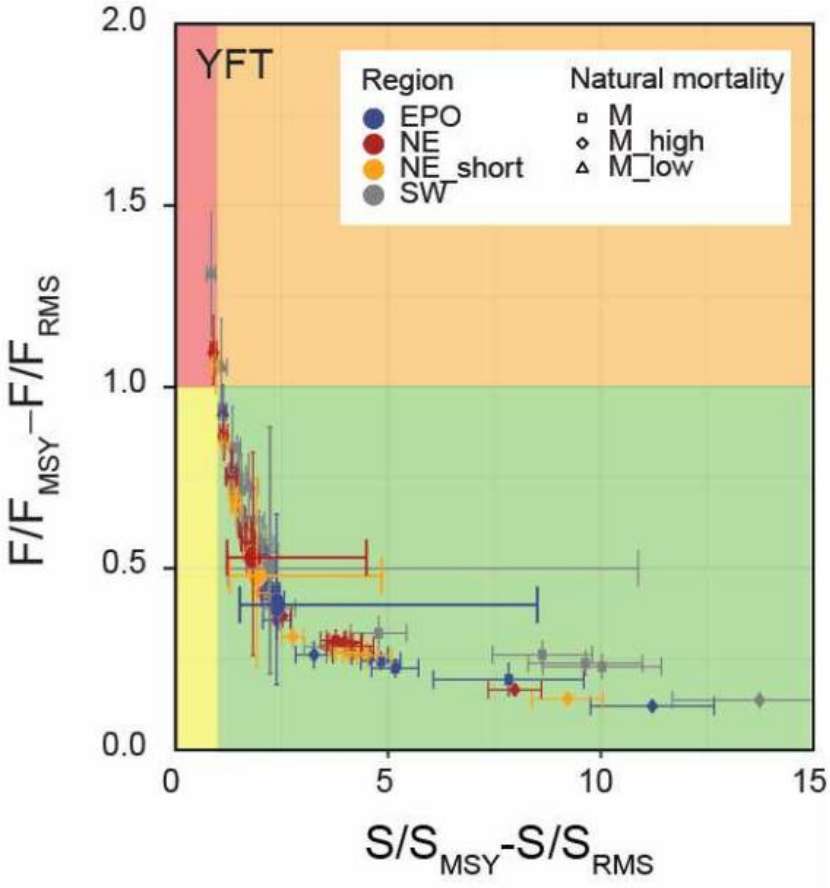
The Eastern Pacific Ocean (EPO) yellowfin tuna stock is managed and assessed by the Inter-American Tropical Tunas Commission (IATTC). A full benchmark of the stock was conducted in 2025, specifically aiming to tackle one of the main sources of uncertainty in the stock, that of stock structure (IATTC 2025). Catches of yellowfin in the EPO are shown in the chart below. The most recent full stock assessment was conducted in 2025 and C1.1 is met.



Total catches of yellowfin tuna in the EPO by set type. Data for 2023 and 2024 are preliminary. (IATTC 2025)

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.

In the full stock assessments for this stock, multiple reference models are utilised to create a risk-based understanding of stock status. The most recent results, from 2025, indicated that "the spawning biomass ratio…has been above the limit reference point for all the assessment periods" (IATTC 2025), and that the probability of the biomass of fishing mortality currently breaching the limit reference points is zero. A Kobe plot summarising current stock status is provided below. C1.2 is met.



Kobe plot for yellowfin tuna in the EPO of estimates of spawning biomass (S) and fishing mortality (F) relative to their target reference points. (IATTC 2025).

References

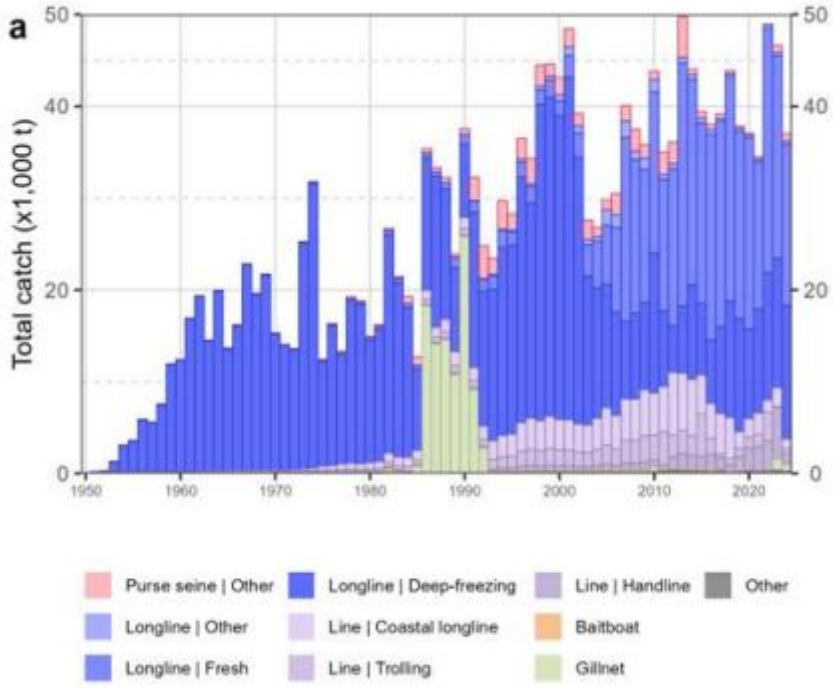
IATTC (2025). The tuna fishery in the Eastern Pacific Ocean in 2024. https://www.iattc.org/GetAttachment/02c5d8e6-6d9b-42b3-a943-a6873f75deac/No-23-2025_The-tuna-fishery-in-the-Eastern-Pacific-Ocean-in-2024_EN.pdf

Species name		***Thunnus alalunga* - Albacore tuna**	
Fishing area and stock		**Indian Ocean albacore**	
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.

Albacore in the Indian Ocean is subject to regular stock assessment by the ITOC. The most recent was conducted in 2025 using Stock Synthesis III, and utilised international catch and CPUE data. There are several CPUE indices available – including those for the North-Western and South-Western fisheries, and several eastern indices – which indicate trends in separate components of the Indian Ocean albacore stock. The stock assessment summary concludes that the western indices "may best represent the abundance of albacore at this time", and that "the eastern indices are affected by changes in targeting" (IOTC 2025).

Catches are presented in the figure below. C1.1 is met.

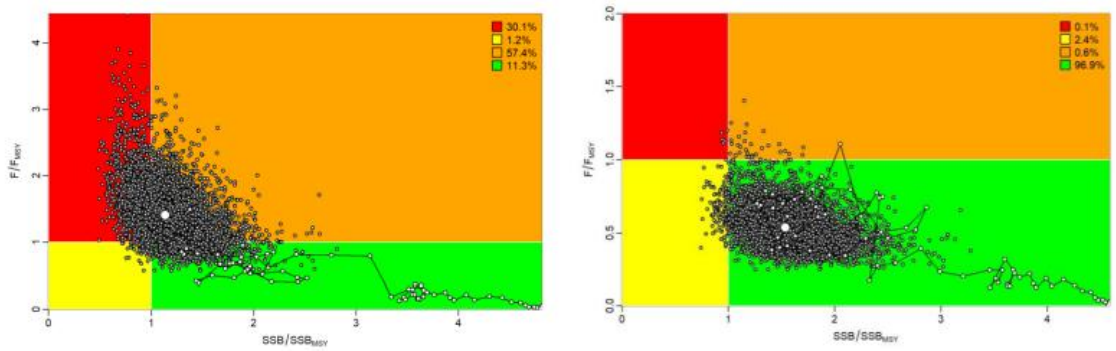


Albacore tuna in the Indian Ocean: Cumulative nominal catches by gear type (IOTC 2025).

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 2025 stock assessment concluded that in relation to the IOTC's interim target reference points, the stock is "not overfished and is not subject to overfishing" (IOTC 2025). The biomass target reference point is set at 0.4*SB_{MSY} (i.e. 40% of the target reference point SB_{MSY}), and therefore the stock assessment also concluded that "current spawning biomass is considered to be…above the limit reference point" (IOTC 2025).

Kobe charts showing the current fishery status are shown below. C1.2 is met.



Albacore tuna in the Indian Ocean: Kobe plots for two model options. On the left, the model fitted to the North-Western CPUE; on the right, the model fitted to the South-Western CPUE. White circles indicate the trajectory of the point estimates for the spawning biomass (SB) ratio and fishing mortality (F) ratio for each year 1950–2023 (the grey lines represent the 95 percentiles of the 2023 estimate) (IOTC 2025).

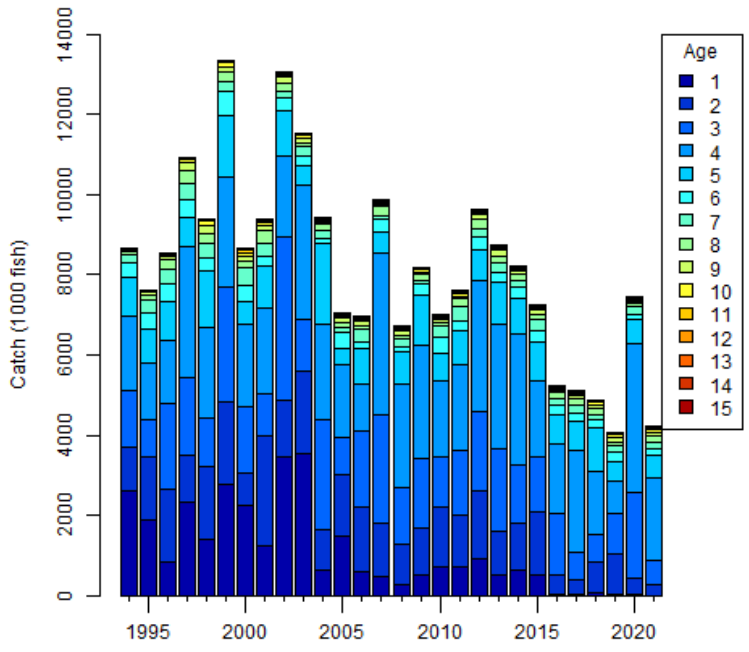
References

IOTC (2025). Albacore tuna stock status and advice, executive summary, 2025. https://iotc.org/sites/default/files/content/Stock_status/2025/English/IOTC-2025-SC28-ES01_ALBE.pdf

Species name		*Thunnus alalunga* - Albacore tuna	
Fishing area and stock		North Pacific albacore	
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.

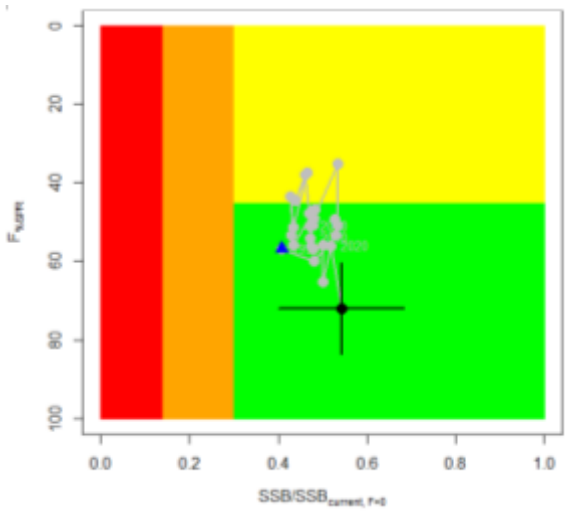
The most recent available stock assessment for the northern Pacific albacore stock was conducted in 2023 and utilised all available data up to 2021. Catch and size composition data were used to inform a length-based, age- and sex-structured Stock Synthesis model. No concerns were raised in the reporting documentation as to the completeness of the catch data (WCPFC 2024). Catches of albacore in the North Pacific are shown in the chart below. C1.1 is met.



Historical catch-at-age of North Pacific Albacore estimated by the base case stock assessment model (WCPFC 2024).

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.

A limit reference point is established for the northern Pacific albacore stock, and is based on dynamic biomass estimates and therefore fluctuates according to changes in recruitment. The limit reference point 14%$SSB_{current, F=0}$ is calculated as 14% of the unfished dynamic female spawning biomass in the terminal year of the assessment (WCPFC 2024). SSB in the most recent stock assessment, conducted in 2023 and providing an indication of stock status in 2021, was estimated to be 54% of $SSB_{current, F=0}$, considerably above the limit reference point. The conclusion reached at the time of the stock assessment was that the stock is likely not overfished relative to the limit reference point. A Kobe plot summarising the current status of the stock is shown below. C1.2 is met.



Stock status phase plot showing the status of the north Pacific albacore (*Thunnus alalunga*) stock relative to the biomass-based threshold and limit reference points, and fishing intensity-based target reference point (F45%SPR) over the modelling period (1994 – 2021). (WCPFC 2024).

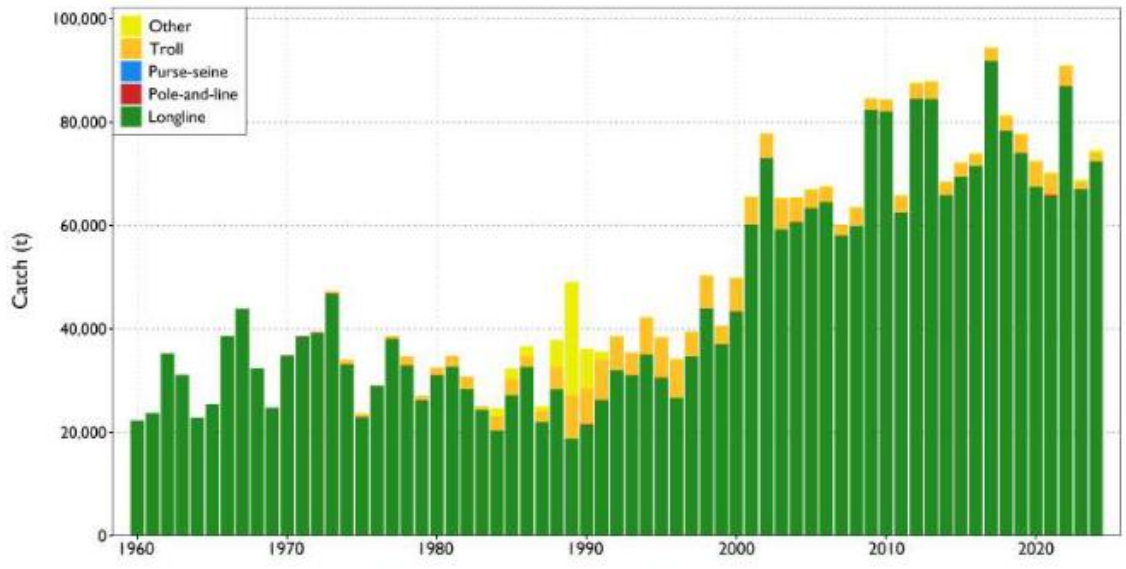
References

WCPFC (2024). North Pacific albacore tuna, stock assessment summary. https://www.wcpfc.int/doc/05/north-pacific-albacore-tuna

Species name		***Thunnus alalunga* - Albacore tuna**	
Fishing area and stock		**South Pacific albacore**	
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.

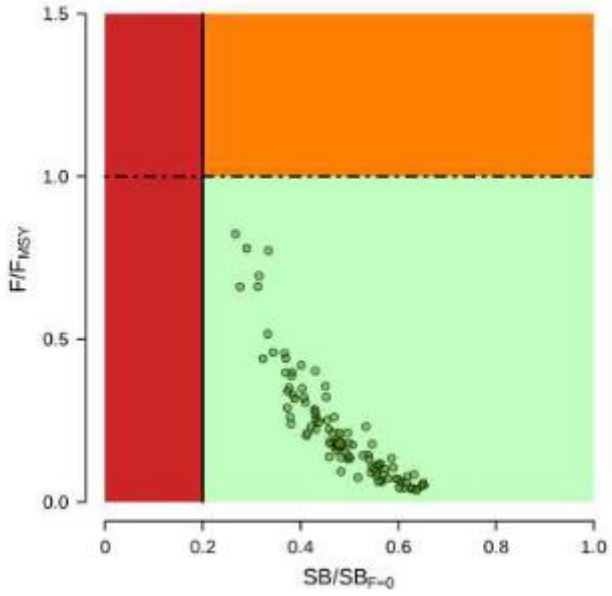
The most recent stock assessment for albacore tuna in the south Pacific was conducted in 2024, using data up to 2022. The assessment used catch data including international catches by fishing gear. The published stock assessment summary (WCPFC 2025) does not appear to include any concerns relating to the availability of catch data. Catches of South Pacific albacore by gear type are shown below. C1.1 is met.



Historical catches of South Pacific albacore from 1960-2024 by gear type (WCPFC 2025)

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 stock is assessed relative to a range of potential reference points (WCPFC 2025), with the key reference point used to determine whether the stock was overfished being 20%$SB_{F=0}$. The 2024 stock assessment concluded that "the median recent spawning biomass from the model ensemble with estimation uncertainty is well above the spawning biomass to achieve MSY" (WCPFC 2025), and that in "all models…$SB_{recent}/SB_{F=0}$ was above the limit reference point of 0.2" (WCPFC 2025). The most recent stock assessment concluded that the stock biomass is highly likely above the target and limit reference points. A Kobe plot summarising the outcomes of the most recent stock assessment is provided below. C1.2 is met.



Kobe plot for Southern Pacific albacore tuna (WCPFC 2025).

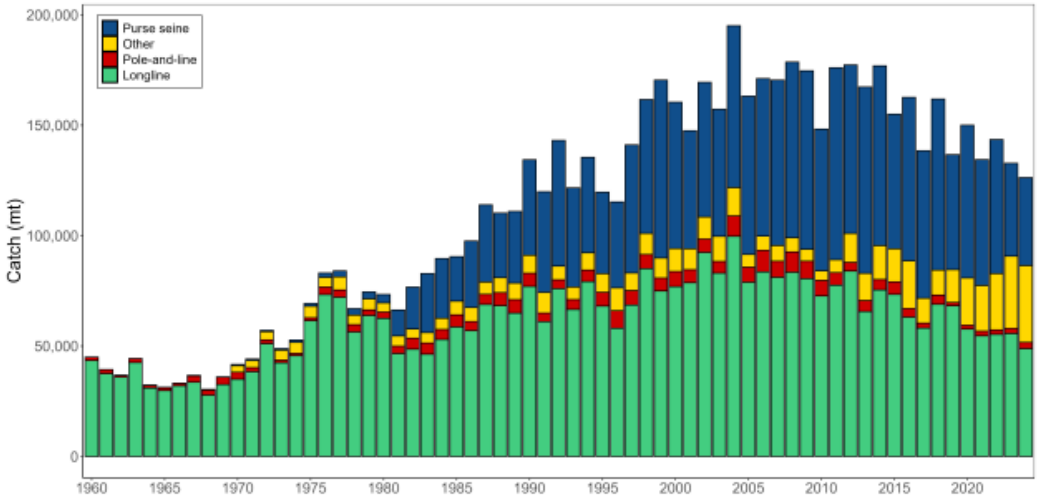
References

WCPFC (2025). The Western and Central Pacific Tuna Fishery: 2024 Overview and Status of Stocks. https://meetings.wcpfc.int/node/28825

Species name		***Thunnus obesus* - Bigeye tuna**	
Fishing area and stock		**Western and Central Pacific bigeye**	
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.

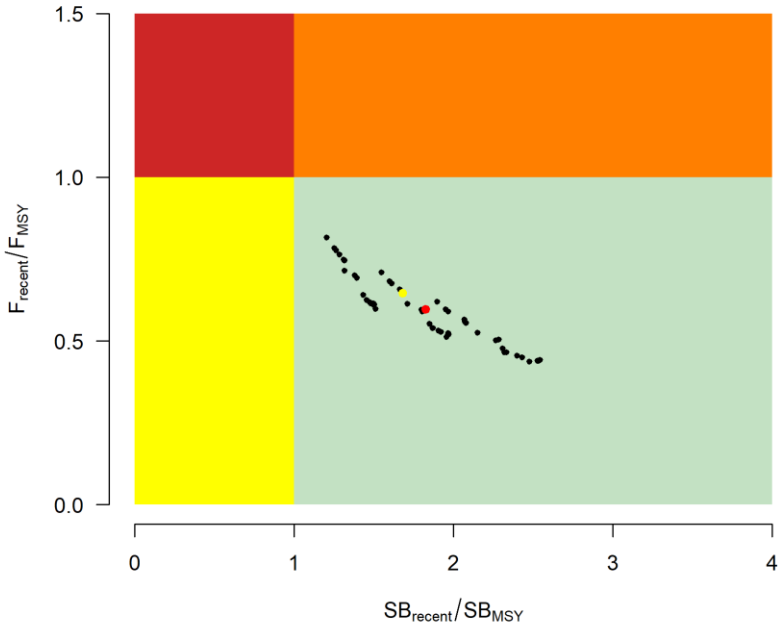
Bigeye tuna in the Western and Central Pacific Ocean is subject to regular stock assessment by the Western and Central Pacific Fisheries Commission. The most recent stock assessment was conducted in 2023, using data up to 2021. The assessment utilised all international catch data. 54 models were applied to take into account the main sources of uncertainty, and the results are presented alongside the likely confidence intervals (WCPFC 2024). All available catch data are incorporated into the assessment, and a chart summarising these data is provided below. C1.1 is met.



Western and Central Pacific bigeye catch (mt) by gear (WCPFC 2025).

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 of the most recent stock assessment produced an estimate of the current status of the stock relative to target reference point SB_{MSY}. The assessment concluded across all 54 models that the mean value of SB_{latest}/SB_{MSY} was 1.76, with an 80% certainty that it was between 1.28 and 2.31 (WCPFC 2024). This translates to a very high probability that stock biomass is above the target reference point SB_{MSY}, and therefore also above any potential limit reference point. The most recent stock assessment summary also states that "For all models in the grid $SB_{recent}/SB_{F=0}$ was above the biomass limit reference point" (WCPFC 2024). A Kobe plot summarising the outcomes of the stock assessment is provided below. C1.2 is met.



Western and Central Pacific bigeye tuna, Kobe plot for recent spawning potential (2018-2021) summarising the results for each of the models in the structural uncertainty grid. Median value is shown in red (WCPFC 2024).

References

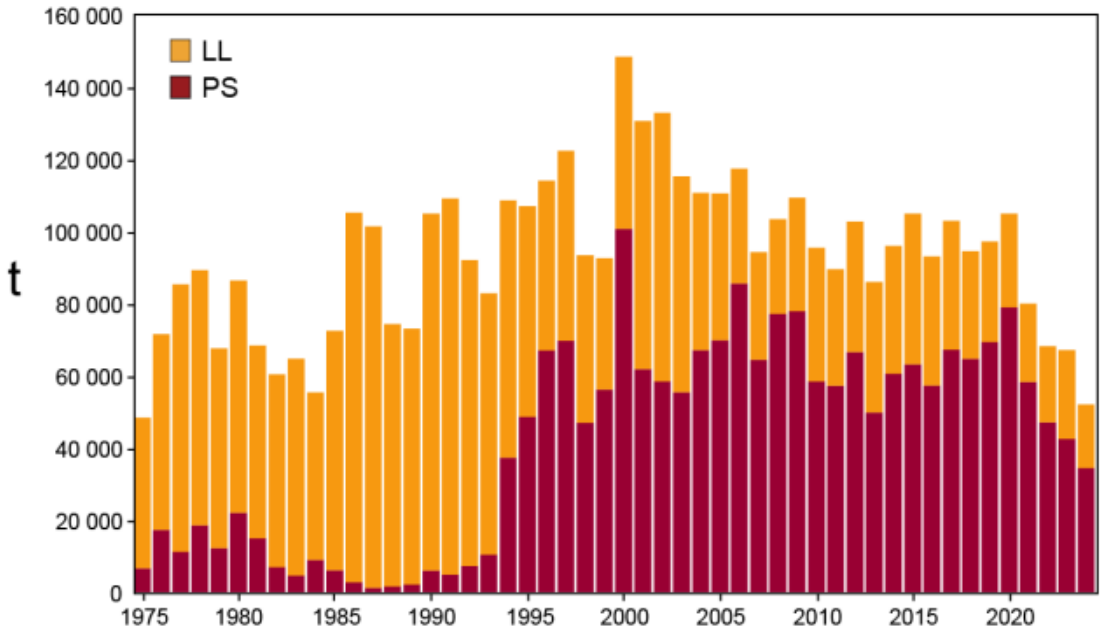
WCPFC (2024). WCPO bigeye tuna stock status and management advice. https://www.wcpfc.int/doc/01/bigeye-tuna

WCPFC (2025). Overview of tuna fisheries in the Western and Central Pacific Ocean, including economic conditions – 2024. https://meetings.wcpfc.int/node/26697

Species name		***Thunnus obesus* - Bigeye tuna**	
Fishing area and stock		**East Pacific bigeye**	
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.

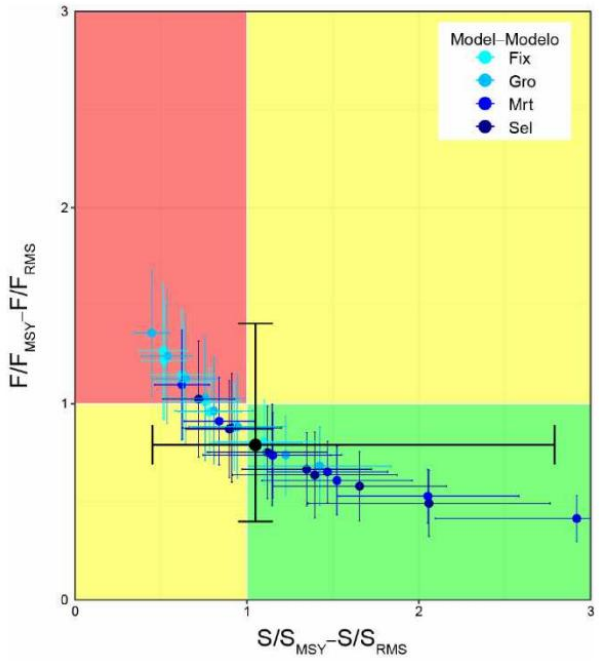
Bigeye tuna in the EPO is subject to regular stock assessment by the Inter-American Tropical Tuna Commission (IATTC). The most recent full stock assessment was conducted in 2024. The assessment utilised all international catch data. 33 models were applied to take into account the main sources of uncertainty, and the results are presented alongside the likely confidence intervals. In 2023, risk-based Stock Status Indicators (SSIs) were introduced. SSIs are considered to be important alternatives to formal stock assessments, particularly where those stock assessments may be too unreliable to form the basis for management advice. In the case of bigeye, they are incorporated into the annual stock status review (IATTC 2025). Catches of EPO bigeye are shown in the chart below. C1.1 is met.



Total EPO bigeye catch by purse seine gears (PS), and retained catches by longline gears (LL), 1975 – 2023. 2020 and 2021 data are preliminary (IATTC 2025).

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 2024 stock assessment produced statistical probabilities for the status of the stock relative to target and limit reference points. The key conclusion for the purposes of this byproduct assessment were that there is a "46.6% probability that the spawning biomass at the beginning of 2024 is below the target reference point", and a "0.2% probability that the spawning biomass at the beginning of 2024 is below the limit reference point" (IATTC 2025). Therefore, there was a very low probability of the biomass being below the limit reference point. A Kobe plot summarising the current status of the stock is provided below. C1.2 is met.



Kobe plot of the most recent estimates of spawning biomass (S) and fishing mortality (F) relative to their MSY reference points (SMSY_d and FMSY) from the thirty-three reference models. Each dot is based on the average F over the most recent three years, 2021-2023, and the error bars represent the 95% confidence interval of model estimates. The black dot and error bars represent the medium and 95% confidence interval of combined values, respectively. (IATTC 2025).

References

IATTC (2025). The tuna fishery in the Eastern Pacific Ocean in 2024. https://www.iattc.org/GetAttachment/02c5d8e6-6d9b-42b3-a943-a6873f75deac/No-23-2025_The-tuna-fishery-in-the-Eastern-Pacific-Ocean-in-2024_EN.pdf

Traceability information

Applicant provided full KDE information for all byproducts listed in this assessment.

Species name	Skipjack tuna, all FAO Areas			
Path 1	Yes ☒ No ☐			
Confirm all KDEs are provided	Yes ☒ No ☐			
Path 2	Yes ☐ No ☐ *If yes for Path 2, complete the next section*			
Path 2 outcome *Countries may be different for Coastal State and Port State.*	**Flag country**	**Coastal score**	**Port score**	**Risk outcome**
				Choose an item.
				Choose an item.

Species name	Yellowfin tuna, all FAO Areas			
Path 1	Yes ☒ No ☐			
Confirm all KDEs are provided	Yes ☒ No ☐			
Path 2	Yes ☐ No ☐ *If yes for Path 2, complete the next section*			
Path 2 outcome *Countries may be different for Coastal State and Port State.*	**Flag country**	**Coastal score**	**Port score**	**Risk outcome**
				Choose an item.
				Choose an item.

Species name	Albacore tuna, all FAO Areas			
Path 1	Yes ☒ No ☐			
Confirm all KDEs are provided	Yes ☒ No ☐			
Path 2	Yes ☐ No ☐ *If yes for Path 2, complete the next section*			
Path 2 outcome *Countries may be different for Coastal State and Port State.*	**Flag country**	**Coastal score**	**Port score**	**Risk outcome**
				Choose an item.
				Choose an item.

Species name	Bigeye tuna, all FAO Areas			
Path 1	Yes ☒ No ☐			
Confirm all KDEs are provided	Yes ☒ No ☐			
Path 2	Yes ☐ No ☐ *If yes for Path 2, complete the next section*			
Path 2 outcome *Countries may be different for Coastal State and Port State.*	**Flag country**	**Coastal score**	**Port score**	**Risk outcome**
				Choose an item.
				Choose an item.

Guidance for Applicants/Certificate holders on improved traceability

When by-product origin cannot be made more granular than major FAO Areas, or when the source fishery is taking place in the High Seas (i.e. outside of EEZs of all relevant nations), an assessor must evaluate the Coastal and Port scores for each nation that straddles that FAO Area. This may lead to higher risk outcomes for an applicant. To mitigate that risk, better practice involves securing KDEs from the source fishery of the by-products, thereby meeting Path 1 instead of Path 2.

What does better practices look like?
Comprehensive data collection and sharing: Collect detailed information using Key Data Elements (KDEs) including vessel identification and authorisation, species, catch areas, fishing method and dates. These are defined in the MarinTrust Standard clauses 2.11.2.2 and 3.2.5.

Supply chain transparency: Maintain detailed records at each step of the supply chain, from capture to final sale, to ensure traceability.

Interoperable systems and technologies to support the collection and transfer of this information.