By-Product assessment report

BP021

Maz Industrial SA de CV

Report code	BP021	Date of issue	February 2026

1. Application details		
Applicant	Maz Industrial SA de CV	
Applicant country	Mexico	
2. Certification Body details		
Name of Certification Body (CB)	NSF / Global Trust Certification Ltd.	
Contact information for CB	NSF Fisheries Team <Fisheries@nsf.org>	
Assessor name	Ana Elisa Almeida Ayres	
CB internal peer reviewer name	Léa Lebechnech	
Internal peer review evaluation	Agree with evaluation	
Number of Assessment days	0.5	
Comments on the assessment	The two byproduct species (Yellowfin and skipjack tuna) are sourced from a high-risk flag state, Mexico, requiring a Step 3 assessment. Additional information was requested from the applicant for the Path 2 that was used. The information was forthcoming and sufficient to enable the completion of the Step 3 process. As a result of this, all the byproduct species can be Approved, source with caution.	
3. Approval validity	Valid from 02/2026	Valid until 02/2027
4. Assessment cycle	Re-Approval	

5. By-product assessment outcomes

By-product species name	Flag country(ies)	Fishing Areas	MarinTrust approval status
Yellowfin tuna (*Thunnus albacares*)	Mexico	FAO 77 (Eastern Central Pacific)	Approved source with caution
Skipjack tuna (*Katsuwonus pelamis*)	Mexico	FAO 77 (Eastern Central Pacific)	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 *Select IUCN red list category from dropdown*	CITES Appendices *Select CITES appendix status from dropdown*	Step 2 risk status *Low risk/ Medium risk/ High risk*	Step 3 required *Yes / No*
Yellowfin tuna (*Thunnus albacares*)	Mexico	Least concern	Not listed	High risk	Yes
Skipjack tuna (*Katsuwonus pelamis*)	Mexico	Least concern	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
Yellowfin tuna (*Thunnus albacares*)	Mexico	FAO 77 (Eastern Central Pacific)	Eastern Pacific Ocean (EPO) yellowfin tuna	Pass	Path 2 – Yes	Risk downgraded to Medium Risk
Skipjack tuna (*Katsuwonus pelamis*)	Mexico	FAO 77 (Eastern Central Pacific)	Eastern Pacific Ocean (EPO) skipjack tuna	Pass	Path 2 – Yes	Risk downgraded to Medium Risk
Comments on Step 3 Assessment: NA						

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
Mexico	High	2.25	3.06	2.78	2	1	5	1	46.70%

Step 3 outcomes

Category C assessment

Species name		**Yellowfin tuna (*Thunnus albacares*)**	
Fishing area and stock		**FAO 77 (Eastern Central Pacific)**	
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 assessment and management of the Eastern Pacific Ocean (EPO) yellowfin tuna stock fall under the responsibility of the Inter-American Tropical Tuna Commission (IATTC). The scientific staff reported the results of a new benchmark stock assessment and risk analysis for yellowfin tuna (Minte-Vera et al 2025). The 2025 benchmark assessment builds on IATTC's risk analysis framework (SAC-16-03), which explicitly incorporates uncertainty into stock status evaluation and management advice. The approach considers alternative hypotheses regarding the spatial structure of the stock across the eastern Pacific Ocean and its northeastern and southwestern regions, as well as biological uncertainties related to growth and natural mortality. In addition, a gradual increase in catchability over time, represented as a 1% annual effort creep, is included, along with different assumptions about the steepness of the stock–recruitment relationship. Together, these elements generate a total of 72 reference models. The assessment also introduces important methodological advances, including improved spatial modelling based on new cluster analyses of length composition data that define northeastern and southwestern regions with limited movement between them, leading to the use of separate regional models. Biological parameters such as growth, natural mortality, and reproductive dynamics were updated using information from otoliths, tagging studies, and spawning data, and effort creep was incorporated to better reflect increasing fishing efficiency over time Minte-Vera et al, 2025).

Updated catches of yellowfin tuna are provided in Figure 1.

	YFT			SKJ			BET			Total		
	EPO	WCPO	Total	EPO	WCPO	Total	EPO	WCPO	Total	EPO	WCPO	Total
1995	244,639	442,805	687,444	150,661	977,478	1,128,139	108,210	110,385	218,595	503,510	1,530,668	2,034,178
1996	266,928	425,669	692,597	132,335	999,701	1,132,036	114,706	107,168	221,874	513,969	1,532,538	2,046,507
1997	277,575	481,019	758,594	188,285	939,497	1,127,782	122,274	133,495	255,769	588,134	1,554,011	2,142,145
1998	280,606	536,845	817,451	165,489	1,244,132	1,409,621	93,954	152,415	246,369	540,049	1,933,392	2,473,441
1999	304,638	474,648	779,286	291,249	1,070,280	1,361,529	93,078	162,524	255,602	688,965	1,707,452	2,396,417
2000	286,863	506,028	792,891	230,479	1,194,139	1,424,618	148,557	148,094	296,651	665,899	1,848,261	2,514,160
2001	425,008	504,501	929,509	157,676	1,100,714	1,258,390	130,546	134,459	265,005	713,230	1,739,674	2,452,904
2002	443,458	489,995	933,453	167,048	1,253,634	1,420,682	132,806	157,958	290,764	743,312	1,901,587	2,644,899
2003	415,933	563,926	979,859	300,470	1,245,155	1,545,625	115,175	143,471	258,646	831,578	1,952,552	2,784,130
2004	296,847	595,888	892,735	217,249	1,354,765	1,572,014	110,722	182,599	293,321	624,818	2,133,252	2,758,070
2005	286,492	551,822	838,314	283,453	1,418,105	1,701,558	110,514	154,748	265,262	680,459	2,124,675	2,805,134
2006	180,519	537,076	717,595	309,090	1,479,366	1,788,456	117,328	165,386	282,714	606,937	2,181,828	2,788,765
2007	182,141	565,930	748,071	216,324	1,663,353	1,879,677	94,260	165,365	259,625	492,725	2,394,648	2,887,373
2008	197,328	644,365	841,693	307,699	1,649,067	1,956,766	103,350	171,317	274,667	608,377	2,464,749	3,073,126
2009	250,413	558,914	809,327	239,408	1,761,272	2,000,680	109,255	169,294	278,549	599,076	2,489,480	3,088,556
2010	261,871	564,607	826,478	153,092	1,680,215	1,833,307	95,408	139,796	235,204	510,371	2,384,618	2,894,989
2011	216,720	530,946	747,666	283,509	1,536,806	1,820,315	89,460	168,119	257,579	589,689	2,235,871	2,825,560
2012	213,310	625,697	839,007	273,519	1,731,944	2,005,463	102,687	167,245	269,932	589,516	2,524,886	3,114,402
2013	231,170	578,467	809,637	284,043	1,831,413	2,115,456	86,029	154,783	240,812	601,242	2,564,663	3,165,905
2014	246,784	618,262	865,046	265,490	1,985,110	2,250,600	96,054	169,046	265,100	608,328	2,772,418	3,380,746
2015	260,265	589,128	849,393	334,049	1,788,545	2,122,594	104,820	145,709	250,529	699,134	2,523,382	3,222,516
2016	255,465	660,291	915,756	345,163	1,788,760	2,133,923	92,952	156,656	249,608	693,580	2,605,707	3,299,287
2017	224,800	710,202	935,002	327,629	1,609,970	1,937,599	102,860	130,595	233,455	655,289	2,450,767	3,106,056
2018	253,305	696,706	950,011	291,352	1,843,398	2,134,750	94,479	154,404	248,883	639,136	2,694,508	3,333,644
2019	242,248	682,704	924,952	350,992	2,044,477	2,395,469	97,145	131,808	228,953	690,385	2,858,989	3,549,374
2020	231,603	726,403	958,006	298,583	1,721,476	2,020,059	104,893	146,497	251,390	635,079	2,594,376	3,229,455
2021	263,755	747,354	1,011,109	328,616	1,684,029	2,012,645	79,953	132,915	212,868	672,324	2,564,298	3,236,622
2022	298,897	689,051	987,948	298,136	1,715,934	2,014,070	68,217	140,838	209,055	665,250	2,545,823	3,211,073
2023	306,170	739,277	1,045,447	390,549	1,631,322	2,021,871	67,233	140,673	207,906	763,952	2,511,272	3,275,224
2024	294,493	*	294,493	645,260	*	645,260	51,936	*	51,936	991,689	*	991,689

Figure 1. Total annual catches (t) of yellowfin, skipjack, and bigeye tunas, by all types of gear combined, in the Pacific Ocean. The EPO totals for 1995-2024 include discards from purse-seine vessels with carrying capacities greater than 363 t. (IATCC, 2025).

Fishery removals of the species in the fishery under assessment are included in the stock assessment process, so clause C1.1 is met.

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.

Across all spatial hypothesis, yellowfin tuna spawning biomass has consistently remained well above the limit reference point (Minte-Vera et al 2025). The likelihood of the stock being below the target spawning biomass is close to zero in nearly all risk assessment scenarios and spawning stock abundance exceeds the limit reference point in every scenario, with an estimated probability of falling below the limit equal to zero in all cases. Fishing mortality is well below MSY and limit reference points. These outcomes are graphically represented in Figure 2.

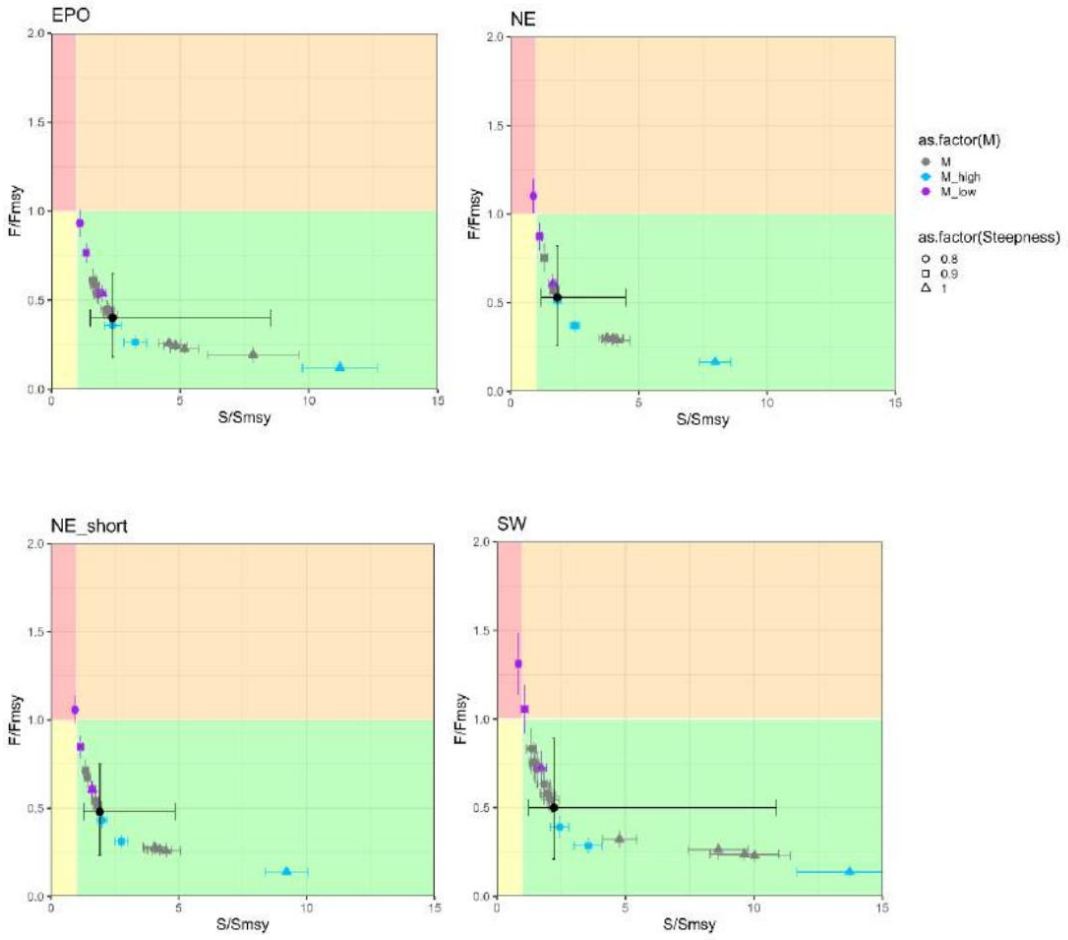

Figure 2. Kobe plots showing the most recent stock assessment status of yellowfin tuna in the Eastern Pacific Ocean and subregions relative to the dynamic level producing MSY and fishing mortality relative to the level producing the same biomass dynamic level associated with MSY. Each dot is based on the average F over the most recent three years, 2021-2023, and the S for the first quarter of 2024 and the error bars represent the 80% confidence interval of model estimates. The black dot and error bars represent the medium and 80% confidence interval of combined values, respectively. Minte-Vera et al. (2025).

The species is considered, in its most recent stock assessment, to have a biomass above the limit reference points (or proxy), so clause C1.2 is met.

References

Minte-Vera, C., M.N. Maunder, H. Xu and R. Bi. 2025. Stock assessment of yellowfin tuna in the Eastern Pacific Ocean: 2025. Document SAC-16-03 of the Scientific Advisory Committee, 16th Meeting of the Inter-American Tropical Tuna Commission. La Jolla, California (USA). 02-06 June 2025. 108 pp. SAC-16-03_Yellowfin-benchmark-assessment---2025.pdf

IATTC. 2025. The Tuna Fishery in the Eastern Pacific Ocean in 2024. Document SAC-16-01 CORR of the Scientific Advisory Committee, 16th meeting. Inter-American Tropical Tuna Commission. La Jolla, California (USA). 02-06 June 2005. 48 pp. SAC-16-01_The-tuna-fishery-in-the-Eastern-Pacific-Ocean-in-2024.pdf

Species name		Skipjack tuna (*Katsuwonus pelamis*)	
Fishing area and stock		FAO 77 (Eastern Central Pacific)	
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.

No new stock assessment was performed since the previous 2025 MarinTrust assessment.

Skipjack tunas are widely distributed in tropical waters across the Pacific Ocean, with the Eastern Pacific Ocean (EPO) stock primarily harvested by purse-seine fisheries. Since 1990, purse-seine sets associated with floating objects have become the dominant fishing method.

A benchmark stock assessment for EPO skipjack tuna was conducted in 2024 using an integrated statistical age-structured catch-at-length model in Stock Synthesis. This assessment marks a substantial improvement over the interim 2022 assessment, incorporating advancements in methodology and new data, including tagging information from the Regional Tuna Tagging Program.

The assessment model is informed by multiple data sources, including information from sixteen defined fisheries and five survey-based indices. These fisheries are categorized by gear type (purse-seine, longline) and set type (dolphin-associated, floating-object associated, and unassociated), ensuring that all fishery removals are accounted for in the evaluation. Additional survey data include catch-per-set indices, echosounder buoy data, and biomass estimates derived from spatiotemporal modelling of tag-recapture data. A reference model was established based on the most credible assumptions, with sensitivity analyses conducted to assess the impact of varying model parameters (IATCC, 2024).

Updated catches of skipjack are provided in Figure 1 above.

Fishery removals of the species in the fishery under assessment are included in the stock assessment process, so clause C1.1 is met.

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 reference model, along with most sensitivity analyses, indicated that the current biomass exceeds the target reference point, while fishing mortality remains below the target level. The only exception is a more pessimistic scenario that omits the echosounder buoy index, which suggests the stock falls below the proxy target—but only when using the static definition. Importantly, none of

the evaluated scenarios suggest that the stock has dropped below the limit reference point (IATCC, 2024).

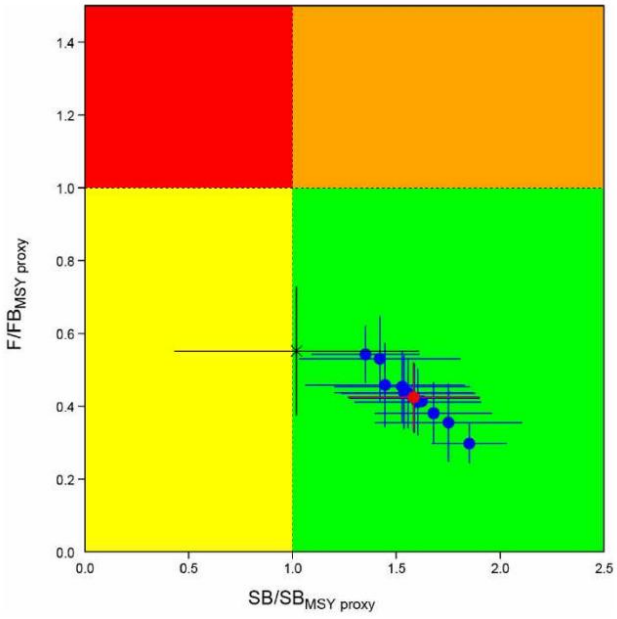

Figure 3. Kobe plot showing the stock status estimates from all the models. The red dot and error bars represent the estimates from the reference model. The black cross and error bars represent the estimates from the model that removed the ECHO index (IATCC, 2024).

The species is considered, in its most recent stock assessment, to have a biomass above the limit reference points (or proxy), so clause C1.2 is met.

References

IATCC. 2024. THE TUNA FISHERY IN THE EASTERN PACIFIC OCEAN IN 2023. https://www.iattc.org/GetAttachment/1ed36788-07ce-4bf4-80e4-10c6c3b2b14d/No-22-2024_Tunas,-stocks-and-ecosystem-in-the-eastern-Pacific-Ocean-in-2023.pdf

IATTC. 2025. The Tuna Fishery in the Eastern Pacific Ocean in 2024. Document SAC-16-01 CORR of the Scientific Advisory Committee, 16th meeting. Inter-American Tropical Tuna Commission. La Jolla, California (USA). 02-06 June 2005. 48 pp. SAC-16-01_The-tuna-fishery-in-the-Eastern-Pacific-Ocean-in-2024.pdf

Traceability information

Information provided for Step 3 Path 1 or Path 2

Species name	Yellowfin tuna (Thunnus albacares)			
Path 1	Yes ☐ No ☒			
Confirm all KDEs are provided	Yes ☐ No ☒			
Path 2	Yes ☒ No ☐			
Path 2 outcome	**Flag country**	**Coastal score**	**Port score**	**Risk outcome**
	Mexico	2.86	3.06	Downgraded to medium risk

Species name	Skipjack tuna (*Katsuwonus pelamis*)			
Path 1	Yes ☐ No ☒			
Confirm all KDEs are provided	Yes ☐ No ☒			
Path 2	Yes ☒ No ☐			
Path 2 outcome	**Flag country**	**Coastal score**	**Port score**	**Risk outcome**
	Mexico	2.86	3.06	Downgraded to medium risk

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.