



Marine
Stewardship
Council



Sustainable Tuna Yearbook 2024

Market data, innovations and insights from communities protecting our ocean

Contents

A year in tuna: A global movement	4
The rise of MSC certified tuna	5
Strong market momentum: Market analysis of global tuna	6
Sustainable ambitions: Navigating a course to 2030	9
Setting new standards	11
Why choose MSC certified tuna?	14
Impact on the water: Incentivising fisheries to attain higher levels	17
Getting certified case study:	
Katsuo Ippon-zuri Gyogyo albacore and skipjack pole and line fishery	19
Improving fisheries case study: North Atlantic albacore artisanal fishery	21
A trailblazing FAD fishery in the Indian Ocean	22
Improving fishery practice case study 1:	
PNA Western and Central Pacific skipjack and yellowfin tuna	24
Improving fishery practice case study 2:	
Usufuku Honten Northeast Atlantic longline bluefin tuna fishery	26
Supporting fisheries towards certification: In-Transition to the MSC	28
The MSC's Ocean Stewardship Fund	29
Over to you: what's on the mind of the sustainable tuna sector	30
Tuna essentials: Gear types	32
Tuna species	34
Glossary	36



A Year in Tuna

- 1.6 million tonnes of MSC certified tuna catch
- More than 200,000 metric tonnes of MSC labelled canned tuna
- 182 engaged fisheries harvesting 53% of global tuna catch



Sustainable tuna: A global movement

The world is shifting towards sustainable tuna. It's what consumers demand and it's what the market is delivering.

The latest figures reflect this impressive ongoing growth in MSC labelled tuna: more than 200,000 metric tonnes of MSC labelled canned tuna worldwide, 50% growth in the volume of MSC labelled frozen tuna, and 182 engaged fisheries harvesting 53% of global tuna catch.

The volume of tuna products sold with the MSC label has almost tripled in the past five years as more brands and retailers make sourcing and selling commitments. Many of our partners have been at the forefront of this growth: Aldi has seen double digit growth in the UK and USA, Rio Mare continues to consolidate its leadership position as Europe's biggest MSC labelled tuna brand, and MSC labelled tuna production in Ecuador has almost doubled.

Fisheries are reaching new frontiers, too. Five have been certified already this year, including, for the first time, a fishery catching yellowfin and albacore tuna in Canada, while the Maldives pole and line fishery has been certified for the third time. Other milestones are a testament to the hard work of our stakeholders. For example, certified skipjack tuna is now available from all four oceans, nearly all Korean longline tuna fisheries are engaged in the MSC program, and state-of-the-art harvest control rules set for Atlantic bluefin tuna stocks will ensure recovery should they ever fall below sustainable levels.

This report is full of stories and crucial details, of people working together to make a difference. It's time to get on board and join this global movement.



The rise of MSC certified tuna

33%

of global tuna catch is MSC certified

20%

of global tuna catch is currently in assessment to the MSC Standard

25%

of global tuna catch is currently in a FIP (basic or comprehensive)

22%

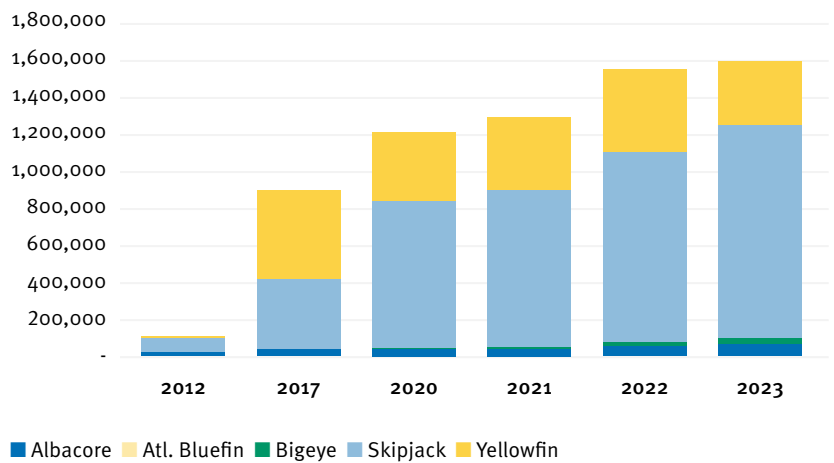
of global tuna catch is neither MSC certified, in assessment or in a FIP

Excludes In-transition to MSC and suspended catch

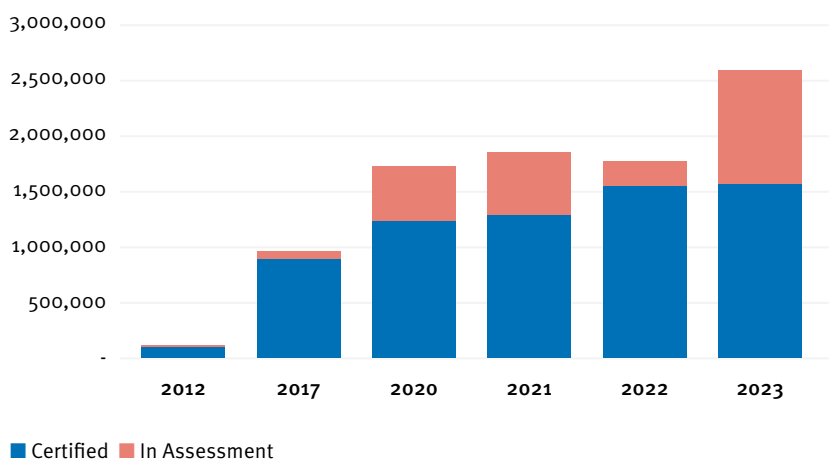
“The market plays an important role to bring fisheries to sustainable fishing.”

Jurgen Pauly, Category Manager for Fish and Seafood, Globus, Germany

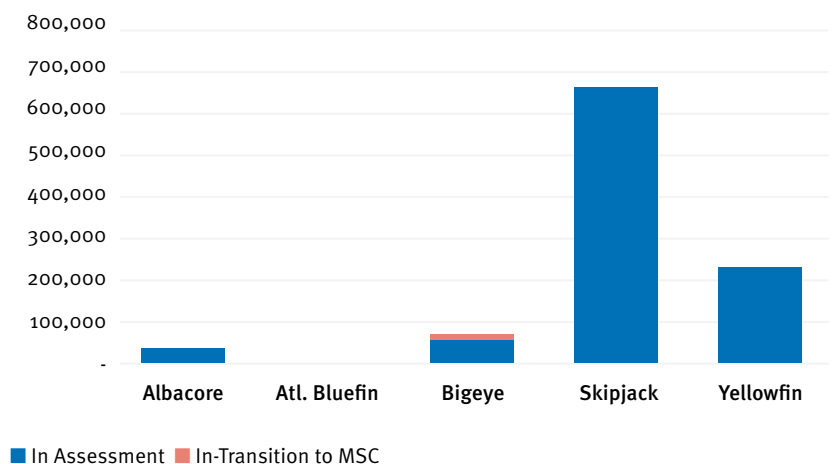
Certified tuna volumes by year, metric tonnes



Growth of tuna in the MSC program, metric tonnes

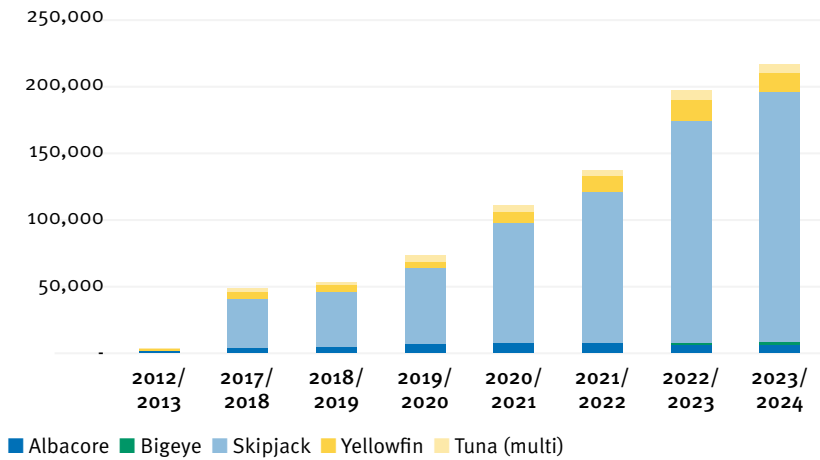


Tuna catch by status (end of 2023), metric tonnes



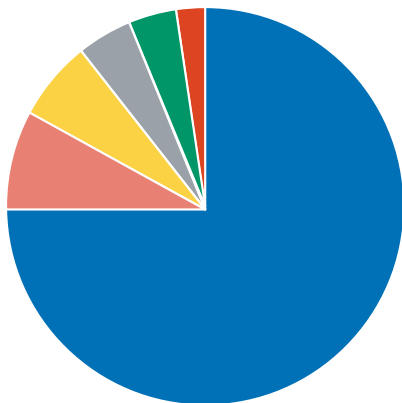
Strong market momentum

MSC labelled tuna volume by species



Country	Total tuna volume (2022/23)
Germany	39,769
United States	34,008
United Kingdom	15,316
Italy	13,590
France	12,327
Australia	11,974
<Multiple>	10,655
Netherlands	8,941
Canada	8,205
Switzerland	8,020

MSC labelled tuna by product type, 2023/2024*



*April 2023-April 2024 forecast

■ Canned ■ Ready meal ■ Food to go ■ Frozen ■ Chilled ■ Pet Food

“Our priority is to offer sustainable food which is affordable.”

Michaela Reischl, Head of CSR at Lidl Spain

Market and species analysis of global tuna

254

brands sold MSC labelled
Skipjack Tuna
up from 49 in 2015

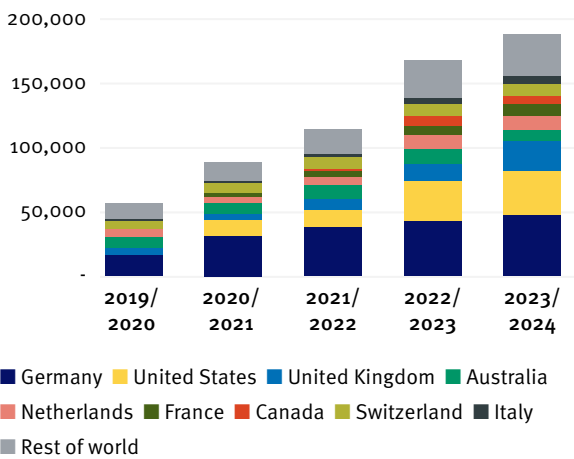
125

brands sold MSC labelled
Yellowfin Tuna
up from 1 in 2015

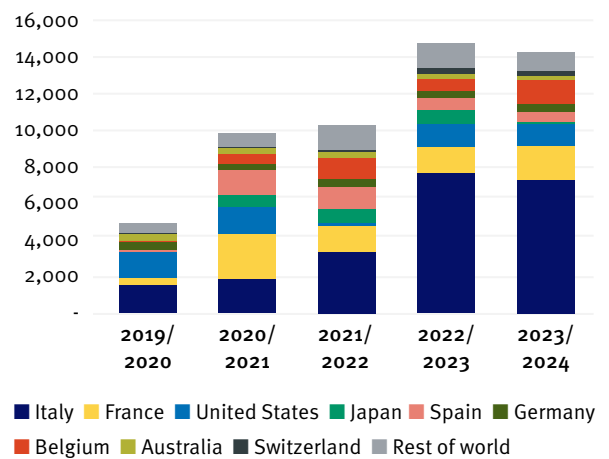
130

brands sold MSC labelled
Albacore Tuna
up from 76 in 2015

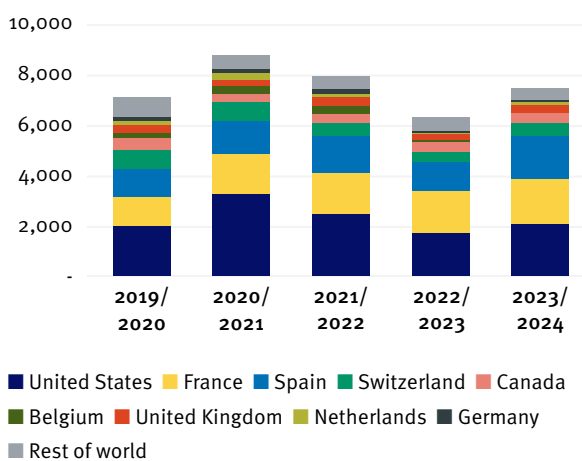
MSC labelled skipjack, metric tonnes



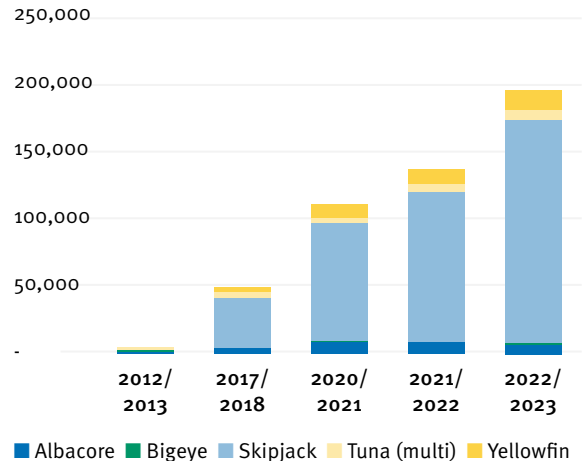
MSC labelled yellowfin, metric tonnes



MSC labelled albacore, metric tonnes

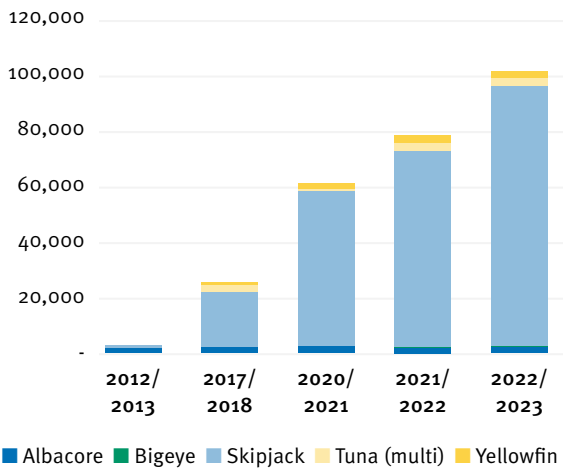


Global labelled volume, metric tonnes

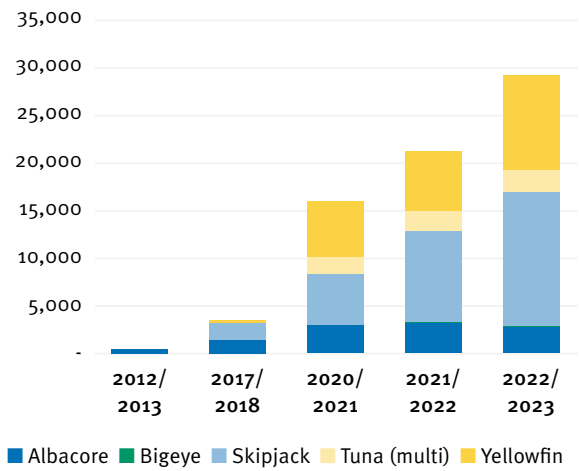


Regional analysis of global tuna

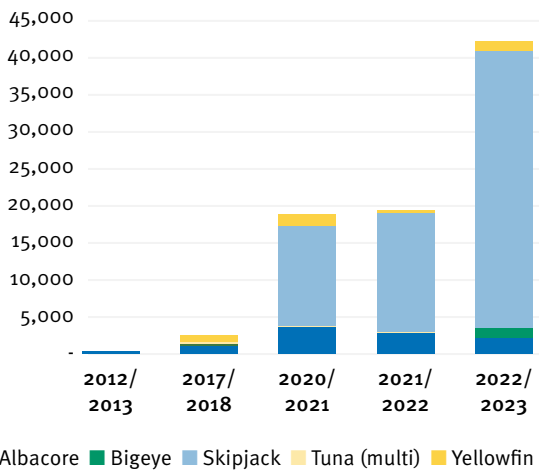
N. Europe & C. Europe labelled volume



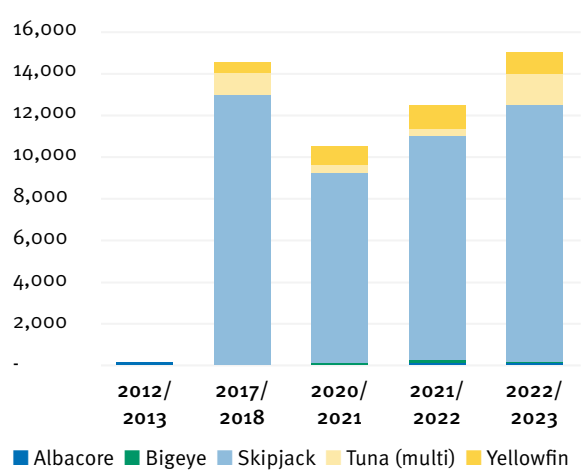
S. Europe & AMESA labelled volume



Americas MSC labelled volume



Asia-Pacific labelled volume



Navigating a course to 2030

Tuna plays a vital role in maintaining the health and balance of the marine food chain within our oceans. This is why tuna is so important to the MSC's vision of having a third of the world's global marine catch certified or engaged with the MSC program, by the end of the decade.

Achieving this goal is ambitious, but essential. It will contribute to global food security, support future generations who are dependent on tuna fishing for their livelihoods, and will also make a significant contribution to the delivery of the United Nations Sustainable Development Goal 14 – Life Below Water. As one of the most widely caught fish on the planet, tuna represents a major component of that target.

Tuna is setting the pace towards the 2030 goal and outperforms most other certified species, except whitefish and small pelagic fish. More than half of commercially important global landings of tuna are either certified or in assessment (meaning fisheries are on their way to demonstrating the sustainability of their operations). By 2030 we could see more than two-thirds of the world's tuna fisheries engaged in certification, backed up by half a million tonnes of MSC labelled products on the shelf.

The MSC's strategy sets out the organisation's

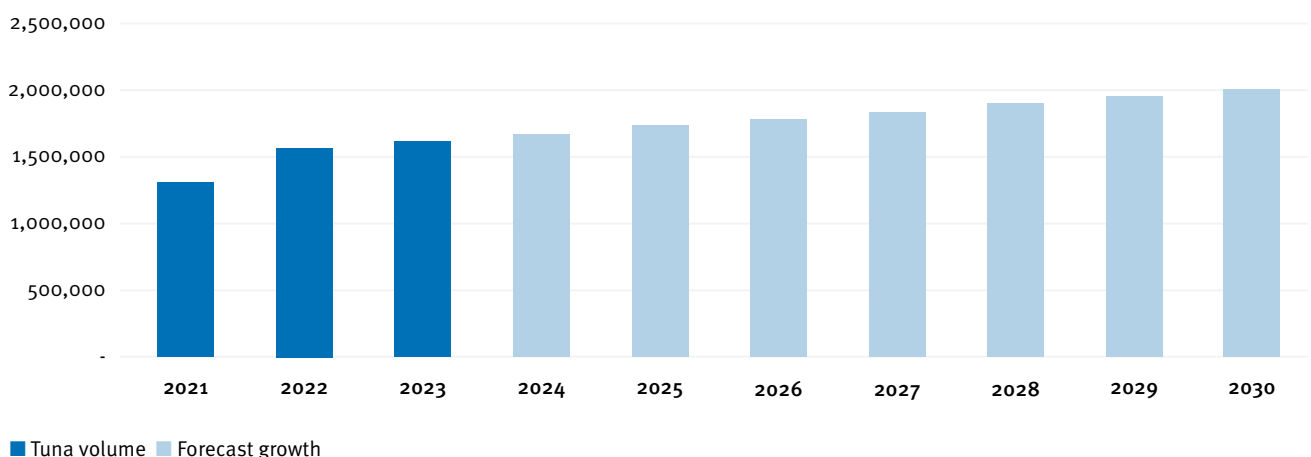
ambitions and priorities between now and 2030, and how it plans to work with partners to make vital progress on ending overfishing. The strategy sharpens the focus on the fisheries, species and markets where our engagement will have the greatest impact – and with 138 MSC engaged tuna fisheries, five major commercial species and a huge global market, tuna will play an important part.

Overcoming challenges

The path to sustainability is not without its challenges. The new version of the MSC Fisheries Standard has sought to address some of the issues facing tuna fisheries and will ensure MSC certified fisheries' position as leaders in sustainability. The new Standard increases confidence that shark finning does not take place in certified fisheries, affords greater protection to Endangered, Threatened and Protected (ETP) species, and requires fisheries to better manage the impacts of FADs (Fish Aggregation Devices).

Agreeing harvest strategies is complicated by the migratory nature of tuna, which travel thousands of miles across oceans. This requires collective agreements, often by many countries, who must juggle domestic fishing priorities with shared harvest strategies. Managing a range of different interests can

Forecast growth in MSC labeled tuna to meet 2030 target, metric tonnes





“The main challenge is the promotion of good governance at an international level because tuna are migratory fish.”

Julio Morón, Managing Director of OPAGAC

53%
of global wild tuna catch from MSC engaged fisheries

33%
of all tuna caught in the world is MSC certified

138
MSC engaged tuna fisheries

make reaching an agreement challenging. However, a sustainable outcome needs to be agreed for fisheries to continue to meet the certification criteria.

We’re seeing this play out among stocks in the Western and Central Pacific Ocean (WCPO) and while it remains a significant challenge, there are positive signs that a harvest strategy for skipjack can be achieved in time to maintain MSC certification in the WCPO.

This cautious optimism, after many years of collective effort, is testimony to the many influential fishing, retail and conservation organisations supporting the ongoing verification of sustainable tuna fishing through MSC certification.

Working together

Tuna fisheries have made substantial progress in improving their practices and 53% of all tuna caught in the world is certified or engaged with the MSC. As a

market-driven program, achieving the 2030 ambition will only be possible with the support of partners and consumers who choose MSC products.

These consumers are more aware than ever of the impact their choices have on the oceans. According to a Globescan survey for the MSC in 2022, 73% believe that people should eat seafood from sustainable sources. The MSC’s mission is designed to tap into the positive influence of market forces, utilising seafood consumption and consumer demand for sustainable products to incentivise increased participation.

Everyone in the supply chain engaged with the MSC is playing a vital part towards tuna’s contribution to the 2030 goal of more than one-third of global landings sourced from MSC certified or engaged fisheries.

The MSC looks forward to working with valued partners to help identify new market opportunities and meet the challenges of the coming decade.

Setting new standards

The MSC Fisheries Standard is used to assess if a fishery is well managed and operating sustainably.

Our Standard reflects internationally accepted best practice in fisheries science and management and is the result of over 25 years of work with scientists, the fishing industry and conservation groups.

Through the Standard, we provide the leading wild-capture fisheries certification scheme, with 550 fisheries certified as sustainable worldwide.

The MSC Fisheries Standard has three principles that every fishery must meet to achieve certification:

Principle 1: Sustainability of the stock: Fisheries must operate in a way that allows fishing to continue indefinitely, without overexploiting the resource.

Principle 2: Ecosystem impacts: Fishing operations need to be managed to maintain the structure, productivity, function and diversity of the ecosystem upon which the fishery depends, including other species and habitats.

Principle 3: Effective management: All fisheries need to meet all local, national and international laws and have an effective management system in place.

How are fisheries assessed against our Standard?

There are 25 performance indicators in the Fisheries Standard that sit under the three principles.

During an assessment, a fishery is assigned a score for each performance indicator by an independent assessor:

Score	Performance level
100	State-of-the-art
80-99	Best practice
60-79	Good practice, improvements required
Less than 60	Fail

To be certified, a fishery must score:

- At least 60 for each performance indicator
- An average of 80 across all performance indicators under each of the three principles

Conditions of certification

If a fishery scores between 60 and 79 for any performance indicator, it is required to make improvements to raise the score to 80 or above within five years. This is known as a condition of certification.



The MSC Fisheries Standard Version 3: what does it mean for tuna fisheries?

KEY TERMS

Fish Aggregating Devices (FADs): man-made floating object used to attract fish. They can either be free floating (known as drifting FADs or dFADs) or anchored to the seabed (known as anchored FADs or aFADs).

Harvest strategies: the combination of monitoring, stock assessment, harvest control rules and management actions taken by a fishery to ensure the target stock remains healthy and sustainable.

Regional Fisheries Management Organisation (RFMO): international bodies made up of representatives of nations with a shared interest in the management and conservation of fish stocks in a defined region.

Shark finning: a cruel and wasteful practice of removing the fins and tail of a shark and discarding the remainder of the body at sea. It is strictly prohibited within MSC certified fisheries.

In October 2022, we launched a new version of our Standard (Version 3). This followed a comprehensive review to ensure our requirements for certification continue to reflect widely accepted science and the evolution and uptake of best practice in fisheries management.

Version 3 will drive improvements in sustainable fishing worldwide and address several important issues faced by tuna fisheries:

Maintaining healthy stocks

Securing the long-term sustainable management of tuna stocks can be challenging. These stocks are often shared across multiple jurisdictions and so a coordinated international effort is needed to develop sustainable tuna management measures ('harvest strategies'). Without robust harvest strategies, the





long-term sustainability of stocks is at risk.

Our new requirements provide a structured framework for setting conditions of certification for fisheries managed by Regional Fisheries Management Organisations (RFMOs) to achieve ‘state of the art’ harvest strategies. As this requires fisheries to meet a higher level of performance than was previously needed, fisheries with previously certified stocks will be given an additional five years to meet the requirements, while fisheries targeting stocks that have not been certified before will have ten years.

Higher levels of monitoring and surveillance

Tuna fisheries spend long periods at sea, making it more challenging for land-based authorities to monitor their activities. Fisheries managed by RFMOs, which include purse seine and longline tuna fisheries, will now be required to have higher levels of surveillance.

Fish Aggregating Devices

Fishing with Fish Aggregating Devices (FADs) can make tuna fishing more efficient but may have negative environmental impacts. Fisheries now need to account for lost FADs and demonstrate how they are avoiding

and managing loss. This includes tracking or retrieving FADs or reducing their impact by using non-entangling and biodegradable FADs.

Shark finning prevention

Tuna fisheries often interact with sharks. A Fins Naturally Attached policy is now required for all fisheries that retain sharks. This means that any sharks caught must be landed with their fins still attached. Fisheries that do not retain sharks must have a non-retention policy in place. The new Evidence Requirements Framework will verify that these policies are in place and adhered to. Shark finning is already strictly prohibited in MSC certified fisheries, but these new requirements will further increase confidence that shark finning is not taking place.

Endangered, threatened and protected species

New requirements will ensure species are more consistently classified as endangered, threatened or protected (ETP) and afforded greater protection. This includes requiring fisheries to demonstrate more explicitly how they minimise impacts on such species and increase confidence that fisheries are not harming the recovery of ETP populations.

Why choose MSC certified tuna?

KEY TERMS

Chain of Custody certification: This standard ensures an unbroken chain where certified seafood is easily identifiable, separated from non-certified products, and can be traced back to another certified business.

MSC certification creates significant value at all points of the supply chain from fisheries to fish-loving consumers. It provides a range of assurances and incentives that can vary depending on the part you play in keeping our oceans fished sustainably.

What MSC certification offers different stakeholders.

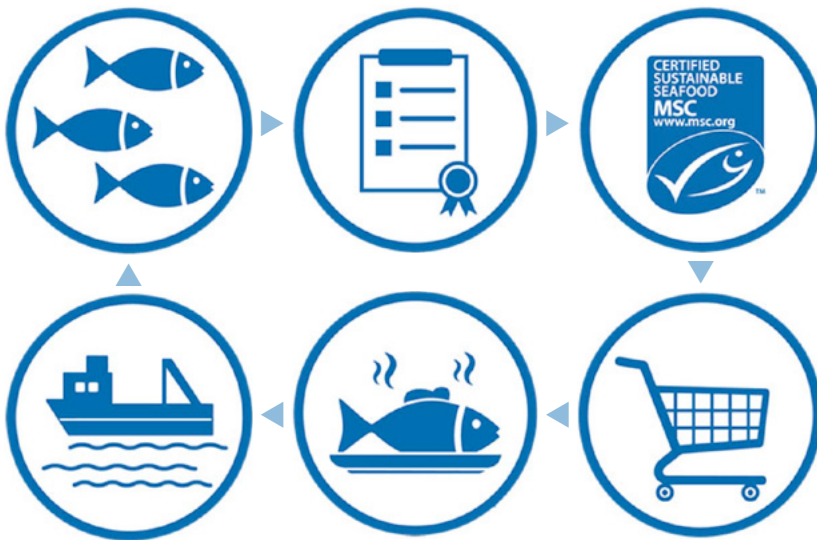
For fisheries it's about:

- Demonstrating you are a sustainable and well managed fishery, regularly checked by independent certification bodies against the MSC Standard.
- Managing your fishery so it is consistent with a global framework of widely adopted best practice.
- Meeting growing demand for sustainable seafood.

For the supply chain it's about:

- Ensuring a sustainable supply of raw material to maintain your business and protect jobs.





Driving change

MSC certification drives change. As more certified seafood enters the market, consumers are given a greater choice of MSC products. This increases demand, led by businesses putting certification at the heart of their sustainable sourcing policies.

Suppliers to those businesses translate that demand by sending stronger signals back to their source fisheries on the business case for certification. We call this virtuous circle our 'Theory of Change.'

The MSC approach means everyone can play a part in protecting the future of our oceans and fish stocks.

“We know that when a fishery is certified to this Standard, it’s validating that it really is the best fishery out there in the world.”

Melissa Tillotson, Senior Aquaculture and Fisheries Manager at Waitrose and Partners, UK

47,858

supply chain sites certified to handle MSC certified seafood

20,000+

products sold with the blue MSC label

66

countries where MSC labelled products are available

- Meeting the global seafood market demand for independently assured sustainable products.
- Managing risk in the supply chain to avoid products from illegal, unregulated and unreported (IUU) fishing, and food fraud.

For brands and retailers it’s about:

- Showing your customers you understand their values and have taken positive action.
- Managing supply risk and reputational damage – MSC certification ensures stocks are healthy, ecosystem impact is sustainable and fisheries are well managed.
- Having assured supply chains – MSC Chain of Custody certification helps to prevent illegal, unregulated and unreported (IUU) catch and mislabelling.

For consumers it’s about:

- Having a simple way to purchase sustainable seafood with confidence – assured it is sourced from certified fisheries.
- Playing a collective part in rewarding sustainably managed fisheries that support healthy ecosystems, with low levels of non-target catch.
- Ensuring seafood is available for future generations by protecting stocks and safeguarding the livelihoods of fishers and their communities.

For NGOs it’s about:

- Driving positive change in the world’s fishing industries and influencing the way they’re managed.
- Having verification and assurance that brands and suppliers are sourcing sustainable products.
- Having a global tool to support advocacy objectives.

Impact on the Water

- How MSC certification leads to higher levels of sustainability
- A trailblazing FAD fishery in the Indian Ocean
- Building on the progress made in Atlantic bluefin stocks



Incentivising fisheries to attain higher performance levels

KEY TERMS

Principles: Fisheries in assessment are scored against the three core principles of the MSC Fisheries Standard: 1) Sustainability of the stock, 2) Ecosystem impacts, 3) Effective fisheries management.

Performance indicators (PIs): 25 PIs sit under the three principles, and fisheries are assigned a score for each.

Condition: A requirement to achieve outcomes that increase a current performance indicator score to 80 or above (best practice).

Improvement: Fisheries use tools to identify where changes are needed, develop an improvement action plan, and monitor progress. Improvements can help close conditions.

A key strength of the MSC's certification program is that even after a fishery has achieved certification, it is incentivised to make continual improvements.

Fisheries must meet requirements across 25 performance indicators (PI) to achieve certification to the MSC Fisheries Standard. However, where a PI meets the MSC's minimum measure of sustainability, but does not yet meet global best practice, a condition is placed on that PI and the fishery must

make improvements and close the condition before reassessment – which usually takes place five years after certification.

Improved performance

A review of five tuna fisheries that have completed two full assessment cycles shows MSC certification has improved their performance for sustainable fishing. Their fishery PI scoring data between assessments was analysed to see how performance improved over time.

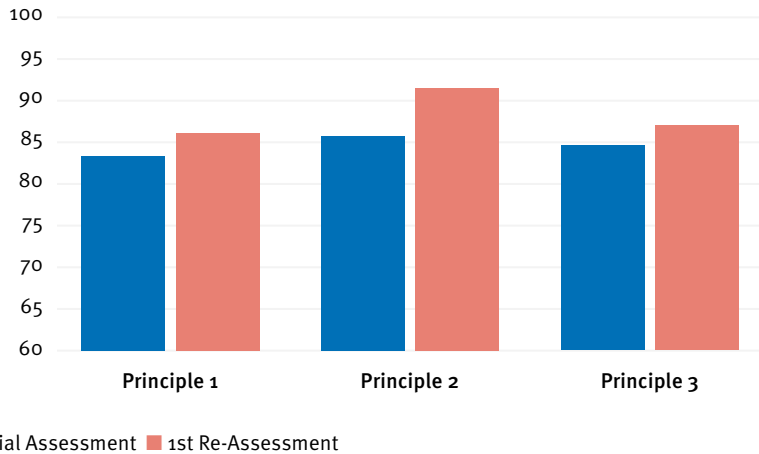
The results are clear: the five fisheries improved measurably over the two certification cycles. This was especially noticeable in the case of PIs under Principle 2 (ecosystem impacts). The five fisheries increased their average Principle 2 (P2) score by nearly 4% to more than 90, achieving 'best-in-class' status.

	Initial Assessment	1st Re-Assessment	% Change
Principle 1	82.72	85.04	+2.8%
Principle 2	87.12	90.32	+3.7%
Principle 3	88.18	89.12	+1.1%

A further analysis considered fishery size. A larger



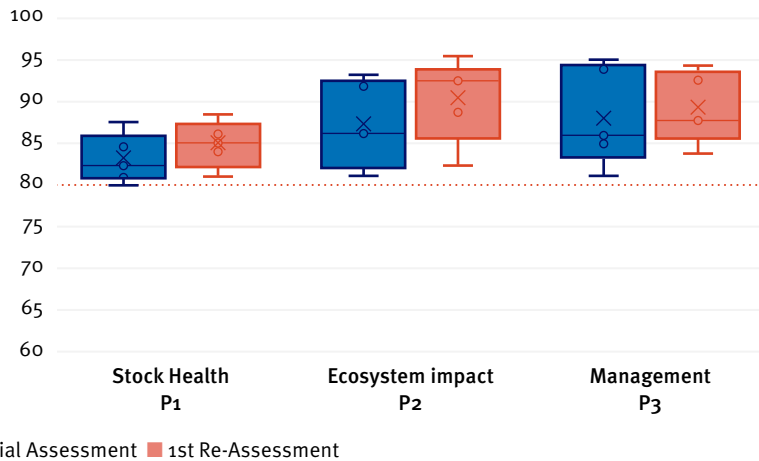
Scoring: Initial Assessments vs. 1st Re-assessment



“Sustainability is a complex matter. So that’s why I would recommend using MSC because you stay on the safe side. You know what you are buying.”

Luciano Pirovano, Chief Sustainability Officer, Bolton Food & Tri Marine, Italy

Scoring: Initial Assessment vs. 1st Re-Assessment



2,225

improvements made by MSC certified fisheries up to 31 March 2023

47,858

sites with Chain of Custody certificate holders

20,838

products with the blue MSC label

fishery will have greater impact on the ocean than a smaller one; there will be more fish taken out of the ocean, hence greater influence on overall stocks, and greater interaction between gear and the surrounding environment. It could be argued that to truly measure improvement in performance, the impact of bigger fisheries should contribute the most to the overall sustainability of the fishery. The second analysis calculated a weighted average of the fisheries’ scores.

The weighted average results are even more compelling: the fisheries have shown a notable improvement over two certification cycles. In fact, their average P2 scores increased by nearly 7%, while Principle 1 (P1) and Principle 3 (P3) scores gained 3%.

As well as conditions and improvements, certified fisheries also undergo annual audits to ensure they making progress on closing their conditions and to consider any material differences from when the initial assessment took place.

This analysis shows that the MSC program creates incentives that make a big impact on the water for these tuna fisheries, especially in mitigating their effects on the marine environment.

	Initial Assessment	1st Re-Assessment	% Change
Principle 1	83.50	86.08	+3.1%
Principle 2	85.69	91.48	+6.8%
Principle 3	84.59	87.06	+2.9%

Case study: Getting certified

Fishery: Katsuo Ippon-zuri Gyogyo albacore and skipjack pole and line fishery

Gear types: Pole & line

Catch volume: 7,692 metric tonnes

Certified since: April 2023

KEY TERMS

Harvest strategy: a combination of management actions using harvest control rules, stock assessments and monitoring.

Harvest control rules: measures that require catch to be adjusted in response to changes in stock status.

Pole & Line: a method of fishing involving a handheld pole with a short length of line and barbless hook to catch tuna (or other large fish) one at a time.

Western and Central Pacific Fisheries Commission (WCPFC): the regional fisheries management organisation responsible for managing tuna stocks across the Western and Central Pacific Ocean.

With more than 1.5 million tonnes of certified tuna landed in 2023 alone and almost one million more tonnes in assessment, the volume of MSC certified tuna continues to grow, year-on-year.

Four new tuna fisheries achieved certification in 2023. One of these is the Japanese Katsuo Ippon-zuri Gyogyo albacore and skipjack pole and line fishery, which targets skipjack in the Western and Central Pacific, and albacore in the North Pacific.

Independent assessors found the fishery has a well-developed governance and management system in place. The fishery also provided data to demonstrate it has low impact on non-target species, habitats and the ecosystem.

Although skipjack and albacore stocks are at healthy levels, the fishery is required to make improvements to safeguard their long-term sustainability and received three conditions of certification to achieve this.





One of these conditions was related to developing more effective harvest strategies. These are essential for ensuring a stock is well-managed for the long-term and the fishery can respond to changes in the population. An effective strategy would also require stronger harvest control rules, which ensure catch is reduced if a stock begins to decline towards pre-determined thresholds.

Implementing harvest strategies and harvest control rules can be challenging, particularly when stocks are shared by multiple countries, as all parties involved need to reach an agreement on these management measures.

Historically there has been slow progress on the development and implementation of effective harvest strategies for skipjack in the Western and Central Pacific Ocean (WCPO). The skipjack stock is managed by a regional fisheries management organisation (RFMO) – the Western and Central Pacific Fisheries Commission (WCPFC) – which has 26 member states.

Tuna fisheries in the WCPO, including the Katsuo Ippon-zuri Gyogyo fishery, have been certified as meeting the minimum requirements for MSC certification on the basis that the WCPFC was working towards implementing harvest strategies and harvest control rules.

The new version of the MSC Fisheries Standard, effective May 2023, includes new requirements that recognise that RFMO-managed fisheries need longer to develop and adopt more comprehensive and robust stock-wide harvest strategies. Such fisheries must now achieve a ‘state-of-the-art’ score during an assessment (the maximum possible) and the harvest strategy must be evaluated to ensure it can maintain stocks at the target level.

The WCPFC has made progress towards developing harvest strategies for the skipjack stock, meeting many of the milestones required by the MSC’s Standard. This includes an agreement, made in December 2022, to adopt harvest strategies for skipjack.

By May 2025, the WCPFC must provide evidence to demonstrate the harvest strategies are effective and will maintain the stock at a sustainable level. Progress has been made towards this through the adoption of a revised measure that specifies skipjack is to be maintained at the target level. This includes limiting the number of days of fishing permitted in the purse seine fishery, and setting limits on catch volume for all other fisheries targeting skipjack.

These measures will ensure skipjack fisheries in the Western and Central Pacific can close conditions of certification relating to harvest strategies.

Case study: improving fisheries

Fishery: North Atlantic albacore artisanal fishery

Gear types: Troll, pole & line

Catch volume: 4,068 metric tonnes (troll), 8,699 metric tonnes (pole & line)

Certified since: 2016

Tough catch restrictions starting nearly a quarter-century ago helped rescue North Atlantic albacore tuna from overfishing. Now, catches are increasing while the tuna stock remains healthy.

The recovery of the albacore tuna population followed decades of overfishing and a decline in stock, with the volume of mature adults ('spawning stock biomass') falling by two thirds between the 1940s and 2011¹.

To rebuild the population, ICCAT – the regional organisation that manages tuna stocks in the Atlantic Ocean – introduced catch restrictions, implementing the first Total Allowable Catch (TAC) in 2001, followed by further management measures. This significantly reduced the amount of albacore being caught and by 2013 a stock assessment found the stock was no longer being overfished.

The progress made towards rebuilding the stock enabled the Spanish North Atlantic albacore artisanal fishery to achieve MSC certification in 2016. However,

the fishery, which operates in the Bay of Biscay and adjacent Atlantic waters, was given conditions of certification that required further steps to be taken to secure the long-term sustainability of the stock.

A new stock assessment, carried out in 2016, confirmed the albacore tuna was not being overfished and that the population was in a healthy condition, resolving the related condition.

ICCAT introduced harvest control rules to ensure catches are reduced if the stock falls below a pre-determined threshold. This helps fishery managers respond quickly to changes in the stock and protect it from overfishing. The rebuilding of the stock allowed the TAC to increase over time. In 2023, ICCAT set the TAC at nearly 50,000 tonnes for the next two years, the highest permitted since 2001.

The fishery was successfully recertified to the MSC Fisheries Standard in 2021. Certification was awarded with no conditions, and the fishery achieved the highest possible score (a 'state-of-the-art' performance) for stock status, confirming the albacore stock is being fished at a sustainable level.

[1] ICCAT (2014) Report of the Standing Committee on Research and Statistics



Case study: A trailblazing FAD fishery in the Indian Ocean

KEY TERMS

Fish Aggregating Devices (FADs): Floating structures made from plastic or natural materials with hanging appendages to attract fish. These rafts can be free floating, known as drifting FADs or dFADs, or anchored to the seabed, known as anchored FADs or aFADs.

Spanish fishery Echebaster is a true pioneer. In 2018 it became the world's first large scale tuna fishery using FADs to be certified as sustainable.

FADs take advantage of the natural phenomenon of small marine life being attracted to floating objects, which in turn attract target species such as tuna. Fishers use FADs to increase their fishing efficiency and are widely employed across the industry.

However, entangling FADs can be problematic. As well as tuna, they can attract endangered, threatened and protected species (ETPs) such as sharks and rays.

Alberto Martín, Senior Fisheries Outreach Manager at the MSC, admits it's a complex area: "[Before





A fundamental shift for fishermen

Guillermo Morán, Managing Director of TUNACONS, Ecuador, reflects on FADs. TUNACONS is a group of eight companies working together in the Eastern Pacific Ocean for a sustainable future.

“It has been a great challenge because it is a change of the fundamental tool for fishermen – converting it from a non-degradable FAD to a biodegradable one. It’s been achieved with a lot of scientific and technical work, but above all with a lot of help from the whole crew, using their ideas to design a prototype that we are already using in the fleet today.

“Science is giving a different answer to those who don’t agree with FAD fishing. By managing the FAD fishery, bycatch of vulnerable or sensitive species is barely 1%. We are not going to pollute the seas with biodegradable FADs. All this work is precisely to demonstrate that the fishery can be transformed into something sustainable.”

“There is a cost to building FADs and an economic incentive to recover FADs and reuse parts. There is also a conservation imperative not to lose the FADs.”

Jan Robinson, FAD Watch

40%

OPAGAC’s target for biodegradable materials in their FADs by end of 2024

15%

estimated increase in BioFADs in the past 5 years

Echebaster] people really didn’t believe that fishing on FADs could be done in a sustainable way... a FAD fishery had never been certified before.”

FAD fisheries have been demonised by certain groups says Dr Julio Morón, Managing Director of OPAGAC, which fishes for tuna across all four oceanic regions: “They believe that FAD fishing means throwing trash into the sea, catching juveniles and entangling bycatch species. But we have been working hard for the last few years to improve all that.”

Echebaster is a model for transforming its fishing practices: materials have been made biodegradable, entangling nets replaced with non-entangling materials

and designs, unwanted bycatch minimised, and ETP species returned to the oceans unharmed as far as possible. These adaptations have incentivised change across the sector. It took Echebaster two certification attempts to pass all of the assessment criteria and reach, in 2018, the ‘global best practice levels’ needed to meet the MSC Fisheries Standard.

“Now all Regional Fisheries Management Organisations have a limit on the use of FADs,” adds Dr Morón. “Regulation is in place, information is released, and bycatch has been intensively decreased. The problem of dealing with lost FADs is going to be tackled next. That’s the way of transformation that people are looking for in any fishery in the world.”

Case study: improving fishery practice

Fishery: PNA Western and Central Pacific skipjack and yellowfin tuna

Gear type: Purse seine nets

Species: skipjack, yellowfin (big eye currently in assessment)

Catch volume: 335,201 metric tonnes (skipjack), 128,751 metric tonnes (yellowfin)

Certified since: December 2011

KEY TERMS

Best practice score: A score of 80 or higher against a performance indicator in the MSC Fisheries Standard that results in a pass without requiring additional improvements.

Bycatch: Unwanted catch that includes undersized or surplus fish that fisheries do not have a quota for, as well as endangered, threatened and protected species, and other unwanted marine species.

Condition of Certification: Set by an independent assessor, a fishery must implement a plan of action to make improvements that will bring it up to global best practice.

Building robust data collection practices was critical for the ‘Parties to the Nauru Agreement’ (PNA) tuna fishery to maintain its MSC certified status and devise a “best practice” approach to reduce interactions with endangered, threatened and protected species of ray.

The PNA tuna fishery, which operates in the Western and Central Pacific Ocean, took steps to ensure Manta and Devil rays (collectively known as ‘mobulids’) are better protected.

As part of the fishery’s MSC certification, a condition was set that meant the fishery had to improve the way it collected data on mobulid rays that have been accidentally caught. This data was crucial for the fishery to develop an effective strategy to minimise its impact on ray populations.

The PNA fishery is the largest MSC certified tuna fishery and provides a vital source of employment for small island nations such as Papua New Guinea, Nauru and the Marshall Islands.

When the fishery was reassessed against the MSC





Fisheries Standard in 2018, independent assessors identified a lack of mobulid population data. The fishery was required to make improvements (a ‘condition of certification’) so its strategy to reduce impacts on ray populations would meet best practice levels within a five-year certification period. The fishery would not be able to seek recertification until this condition was met.

To resolve this condition, the PNA fishery updated its requirements for onboard observers with a greater focus on gathering data on mobulid ray bycatch. Observers now ensure that different sub-species of Manta and Devil rays are accurately identified, and record whether they are in a healthy condition upon capture and when released back into the sea.

A new management measure to improve protections

for mobulid rays in fisheries across the Western and Central Pacific Ocean was introduced in 2019. This included a ban on the deliberate capture of mobulids and best practice guidelines on handling rays and safe release techniques. The measure was adopted by the Western and Central Pacific Fisheries Commission (the regional fisheries management organisation) and applied to all regional tuna fisheries from January 2021.

A subsequent analysis of logbook and observer data found that the identification of different mobulid species has improved over time and that rays were returned to the water in a healthier condition.

The fishery resolved the condition of certification and entered reassessment in 2023. If successful, the new certificate would cover bigeye tuna and include vessels that use Fish Aggregating Devices.

Case study: improving fishery practice

Fishery: Usufuku Honten Northeast Atlantic longline bluefin tuna fishery

Gear type: longline

Tonnage: 58 tonnes (2023)

First certified: August 2020

KEY TERMS

Harvest control rules: Key to maintaining stocks at a sustainable level. It is the combination of monitoring, stock assessment, harvest control rules and management actions taken by a fishery.

International Convention for the Conservation of Atlantic Tunas (ICCAT): the regional fisheries management organisation responsible for tuna in the Atlantic Ocean.

When a Japanese fishery became the world's first bluefin tuna fishery to achieve MSC certification, it took extra steps to secure the long-term sustainability of this once overfished stock.

Usufuku Honten gained its certification in 2020, but the fishery passed with conditions, so was required to make improvements (conditions of certification) that would bring specific fishing activities to global best practice levels. This included demonstrating that precautionary measures are in place to prevent overfishing, and collecting data to support the management of other tuna stocks within the region.

The fishery's certification underlined a significant turnaround in the fortunes of bluefin tuna. Overfishing

in the 1990s severely threatened bluefin in the Eastern Atlantic and Mediterranean, with stocks coming close to collapse in 2006. A recovery plan was introduced in 2007 by ICCAT, which restricted catches and limited the fishing season. Under this plan, the bluefin population made a good recovery, and in 2017 ICCAT determined the stock was no longer overfished.

Usufuku Honten successfully demonstrated that precautionary management measures ('harvest control rules') are in place to reduce the catch if the bluefin population begins to decline. ICCAT also tested different management strategies to identify and account for areas of uncertainty, such as unreported catch and inaccurate data. As a result, this condition of certification was closed in 2023.

A second condition was closed following a study to understand how bluefin from the Eastern Atlantic mix with separate bluefin stocks in the Western Atlantic. The fishery collected tissue samples through an independent observation program, which were analysed to identify where the tuna originated. The findings from this study will improve the method used to calculate the stock population, helping ICCAT set accurate catch limits and enabling the fishery to develop a best practice strategy to manage interactions with Western Atlantic bluefin.

Together, these improvements ensure bluefin stocks are not overexploited and the fishery continues to work towards closing other conditions, including gathering more comprehensive logbook records on interactions with endangered, threatened and protected species.



Supporting Fisheries to Make Improvements

- Independent verification of progress to MSC certification
- More than £400,000 awarded to tuna fisheries since 2020
- Reducing stingray bycatch in the Mediterranean



In-Transition to MSC program

KEY TERMS

Conditional pass: Awarded to fisheries that are awarded MSC certification but required to make improvements to ensure all performance indicators meet global best practice (a score of 80 or above) within the five-year duration of the certificate.

Conformity Assessment Body (CAB): Third-party certification bodies accredited to carry out assessments against the MSC Fisheries Standard.

Fishery Improvement Project (FIP): multi-stakeholder initiatives that aim to help fisheries work towards sustainability.

The In-Transition to MSC program is a mechanism for fisheries to demonstrate their commitment to becoming sustainable.

Often, fisheries need to make significant improvements to their environmental performance before they meet the MSC Fisheries Standard, and many establish Fishery Improvement Projects (FIPs) to achieve this. However, it is important that fisheries in FIPs show measurable progress, and report on this progress regularly and transparently.

The In-Transition to MSC program enables fisheries in FIPs to have their progress towards MSC certification independently verified. This assures that fisheries make credible improvements to their practices and are on target to meet our Standard within five years.

For suppliers looking to source from fisheries in improvement projects, In-Transition fisheries offer the added credibility that comes with our independent verification system.

The program is open to any fishery committed to achieving MSC certification, regardless of size or location. Fisheries must undergo a pre-assessment against our Standard, which highlights the improvements needed, and implement an action plan to address any gaps. Progress against the action plan is tracked and verified frequently by an accredited Conformity Assessment Body. Fisheries are expected to enter full assessment against our Standard, with the aim of achieving at least a conditional pass.

Program participants are also eligible for financial support through the MSC's Ocean Stewardship Fund. Grants of up to £50,000 are available to support the costs of implementing improvements and the costs associated with progress verification.

The program is in a pilot phase until the end of 2024.

In December 2023, the South African Albacore Tuna Pole and Line Fishery became the first fishery to complete the In-Transition to MSC program and enter full assessment to achieve MSC certification. The fishery joined the program in December 2019 and successfully carried out the improvements needed to be assessed against the Standard. The outcome of this assessment is expected towards the end of 2024.



Ocean Stewardship Fund

The MSC's Ocean Stewardship Fund accelerates progress in sustainable fishing worldwide by funding innovative research and helping fisheries adopt and implement practices to help protect the ocean.

The MSC commits 5% of annual royalties from the sale of MSC labelled products to the Ocean Stewardship Fund, in addition to donations from third-parties and leveraged funding.

Since 2020, over £400,000 has been awarded to

nine different tuna fisheries. This includes grants to help reduce bycatch of species such as silky sharks, investigating the use of artificial bait and helping fisheries in the In-Transition to MSC program make the improvements needed to meet the MSC Fisheries Standard. The Fund also supports research by the MSC on the impacts of climate change on fishing.

- Science & Research Fund: 5 grants
- Transition Assistance Fund: 3 grants
- Recertification Assistance Fund: 1 grant



Reducing stingray bycatch

The SATHOAN French bluefin tuna fishery sought to minimise bycatch mortality by studying survival rates of stingrays accidentally caught on longlines. Researchers used electronic tags to monitor stingrays following release and gathered data on their location. Findings suggested high survival rates, with no mortalities recorded in the first seven days post-release.

The study found the safe handling of stingrays when tagging and returning them to the water was key to survival; the team developed a protocol to reduce harm and ensure tags were deployed effectively. Data gathered through tags provided new insights into the stingray's behaviour, with some swimming to depths of over 400 metres.

As a condition of MSC certification, the fishery is required to demonstrate its impact on stingray populations. The findings from this study will support efforts to close the condition.

“There can be no sustainable fishing without taking conservation issues into account.”

Bertrand Wendling, Chief Executive, SATHOAN

106

Total grants awarded

9

Total awarded to tuna fisheries

\$5million

Total spent on all projects

Over £400k

Total spent on tuna fisheries

Over to you...

The MSC always likes to hear from our stakeholders and partners. Your hard-won insights play an important part in reminding us of our priorities and helping us fulfil the MSC's mission to end overfishing and secure food for the future.

ON SUSTAINABILITY

“The trend is clear. Sustainability is becoming a key element of overall brand equity and product quality. So, it's a must.”

Luciano Pirovano, Chief Sustainability Officer, Bolton Food & Tri Marine, Italy

“It's not an option, not to be a sustainable company. We want to continue with our business for a long time.”

Kepa Echevarria, CEO of family-owned Spanish fishery, Echebatar

“There is increased awareness among consumers about sustainable seafood but there's still a lot of work to be done.”

Tim Hendriks, Head of Operations, Fish Tales, Netherlands

ON MSC CERTIFICATION

“MSC certification signifies the highest standard of seafood sustainability for wild fisheries and presents a clear signal to consumers that they can trust Fishwife's sourcing decisions.”

Becca Milstein, Cofounder and CEO of Fishwife Tinned Seafood Co.

ON FACING CHALLENGES AND WORKING TOGETHER

“Tuna are highly migratory, so we cannot claim it is our stock. Unless we all agree, it's very difficult to sustain the stock.”

Adnan Ali, former Managing Director of tuna processor Horizon, Maldives

ON THE MSC'S THEORY OF CHANGE

“The more we choose sustainable seafood, the more it will be available in the market, in this way we are sending a message along the chain, that we love our oceans and want to take care of them.”

Lello Palomba, Chef, Italy

ON LIVELIHOODS

“Our fisheries provide livelihoods for about 20% of the population.”

Hussain Afeef, General Manager, ENSIS Fisheries, Maldives

ON CUSTOMER EXPECTATIONS

“We are responsible for our customers and have to be pioneers who bring sustainable seafood to the people.”

Jurgen Pauly, Category Manager for Fish and Seafood, Globus, Germany

Tuna essentials

- Gear types, how fishers catch tuna
- Tuna species, from skipjack to bluefin
- Glossary of terms



Gear types

Tuna can be caught using various gear types and methods. The type used depends on the size of the tuna and depth at which it swims, the size of the fishery and its location.

Every assessment against the MSC Fisheries Standard considers the gear type used and its impact on the marine environment.

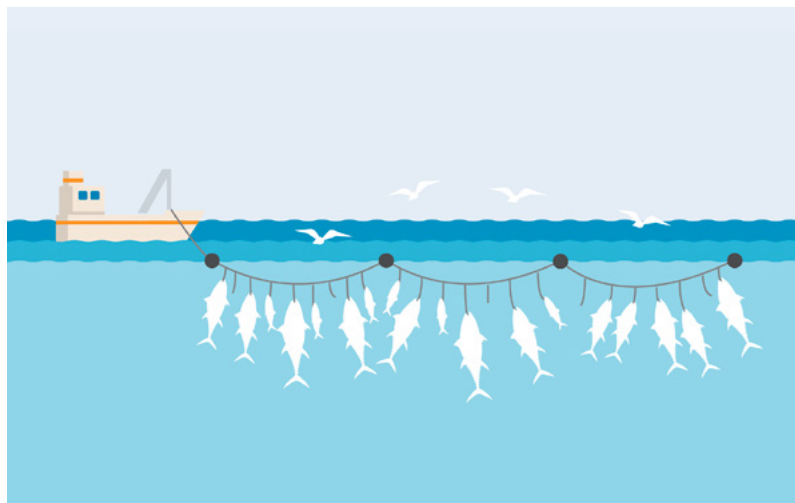
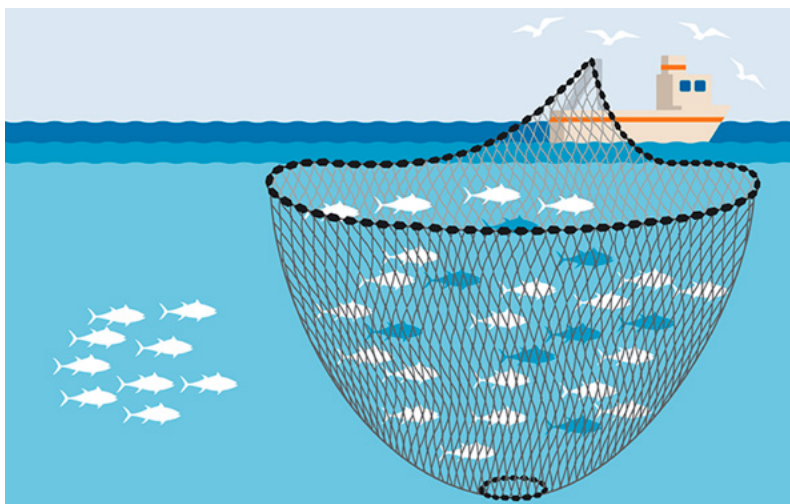
* ISSF Status of the World Fisheries for Tuna (March 2024)

**ISSF Tuna Fisheries Impacts on Non-Tuna Species and Other Environmental Aspects: 2024 Summary

PURSE SEINE

Proportion of global tuna catch: 66%*

A vertical 'wall of net' used to encircle a school of fish. The net is pulled closed from the bottom – like a purse – preventing the catch from escaping. Purse seines can be used to catch tuna congregating around fish aggregating devices (FADs) or on free swimming schools. The majority of skipjack and yellowfin are caught using this method.



LOGLINE

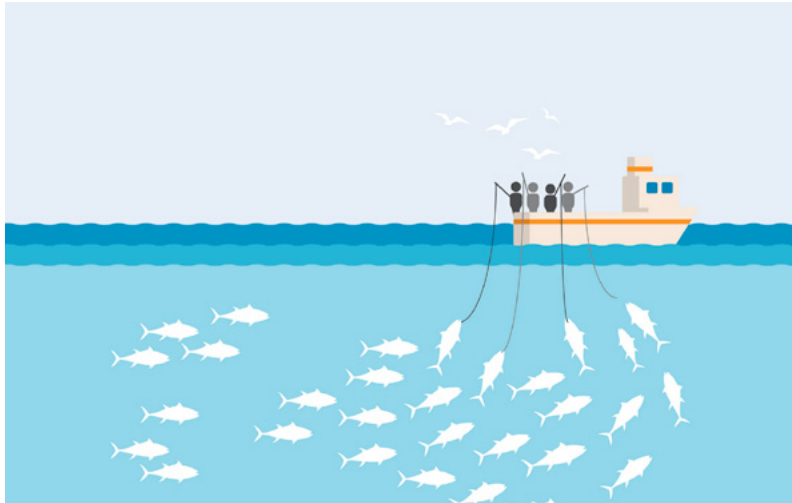
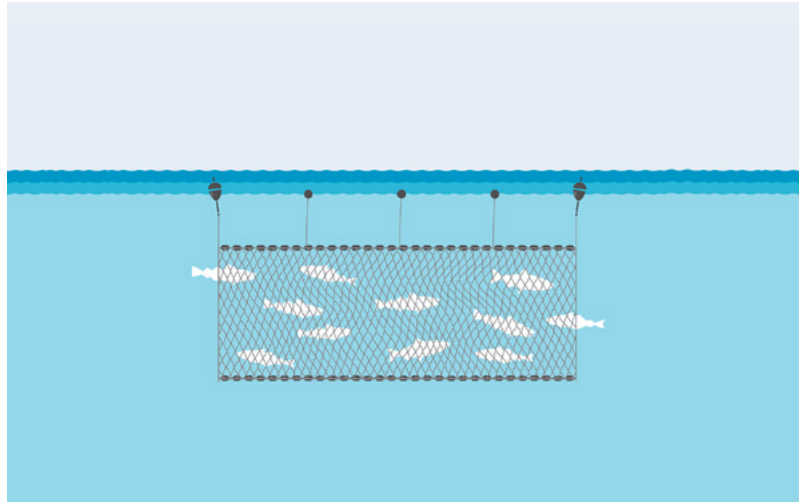
Proportion of global tuna catch: 9%*

A line trailed behind a boat with baited hooks attached at regular intervals. The length of line can vary from several hundred metres to more than 50 kilometres. This method is typically used to catch albacore, bigeye, and bluefin, which can be found in deeper water.

GILLNETS

Proportion of global catch: 4%*

A 'curtain' of netting hanging in the water, which fish swim into and get trapped. There are two types of gillnets, 'set' and 'drift'. Set gillnets are anchored, either to poles fixed to the seabed or an anchor system, whereas drift gillnets are suspended using weights and floats. This method is most commonly used to catch yellowfin and skipjack.



POLE & LINE

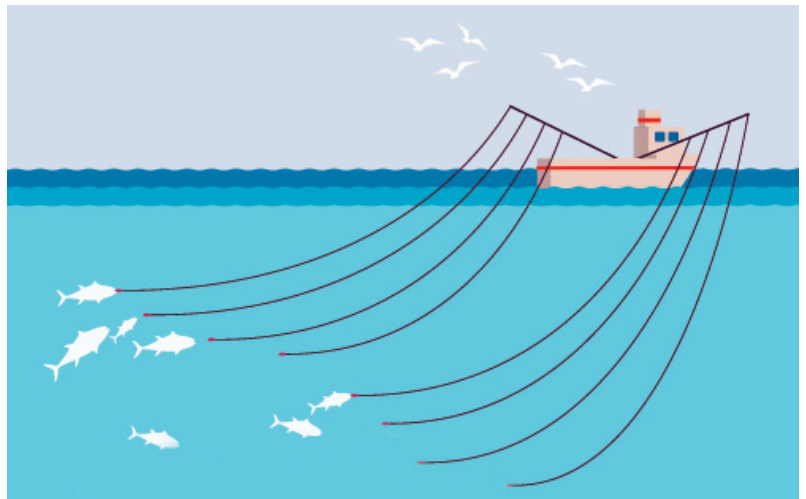
Proportion of global tuna catch: 7%*

Used to catch tuna one by one using hand-held poles with barbless hooks attached to a line. Pole and line gear can also be used to catch fish that congregate around FADs, or free swimming schools. This method is most commonly used to catch skipjack and albacore.

TROLLING

Proportion of global tuna catch: 1.3%**

Trolling is a type of handline fishing. Multiple fishing lines, baited with hooks, are towed behind a vessel. The lines can be hauled in by hand or mechanically. This gear type can be used to catch albacore, bluefin and yellowfin tuna.



Tuna species

Worldwide there are 23 stocks of the major commercial tuna species: five skipjack, four yellowfin, four bluefin, six albacore, and four bigeye stocks.

A recent report from the International Seafood Sustainability Foundation (ISSF) showed that 78% of tuna stocks were at healthy levels of exploitation, 13% were overfished and 9% were at an intermediate level.

*ISSF Status of the World Fisheries for Tuna (March 2024)

ALBACORE TUNA

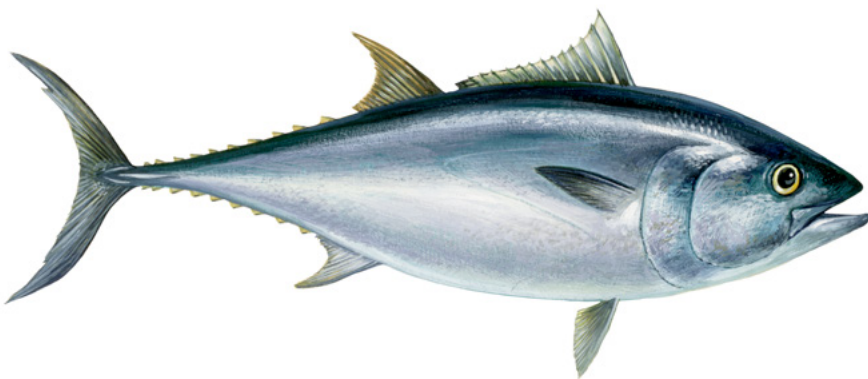
Albacore tuna is often found in deeper waters than other tuna species. The species has a life span of 10-12 years and matures at approximately two to five years. They are highly productive, producing up to 2.5 million eggs every time they spawn. Albacore is also known as 'longfin tuna', or 'white tuna' due to its light flesh. Its dryer texture makes it ideal for canning and it is often sold fresh or in olive oil.



Species name: *Thunnus alalunga* **Distribution:** Global (temperate and tropical regions)
Proportion of global tuna catch: 4%* **Volume MSC certified:** 61,470 tonnes

BLUEFIN TUNA

There are three different species of Bluefin tuna: Atlantic, Pacific and Southern. Bluefin are the largest of the tuna species and can have the longest lifespans, with Atlantic bluefin growing up to three metres in length and living for more than 25 years. High demand for bluefin led to overfishing and put stocks at risk. Implementation of a recovery plan and careful fishery management helped rebuild the Eastern Atlantic stock.



Species name: *Thunnus thynnus* (Atlantic Bluefin), *T. orientalis* (Pacific Bluefin), and *T. maccoyii* (Southern Bluefin) **Distribution:** Global
Proportion of global tuna catch: 1%* **Volume MSC certified:** 565 tonnes

BIGEYE TUNA

Bigeye tuna can reach up to two metres in length. This tuna species grows more slowly than yellowfin or skipjack but matures relatively early at around three years. Typically, Bigeye live at lower depths than yellowfin and skipjack tuna, so have a thick layer of insulating fat. This fat adds moisture, which makes bigeye popular for sashimi markets.



Species name: Thunnus obesus **Distribution:** Indian, Pacific and Atlantic Oceans (tropical and subtropical regions)
Proportion of global tuna catch: 8%* **Volume MSC certified:** 29,666 tonnes

SKIPJACK TUNA

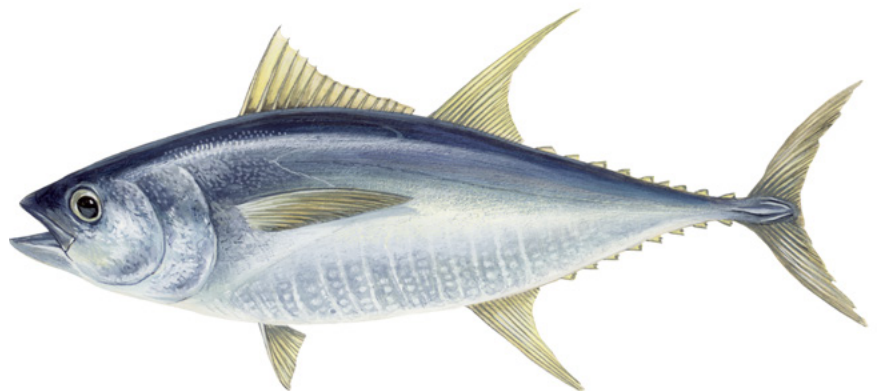
Skipjack tuna are widely distributed and live in the open ocean, feeding near the surface. They are the smallest of the major commercial tuna species, growing up to 80 centimetres in length, and the most abundant. Despite their relatively short lifespan of approximately seven years, they mature rapidly (after one year) and can reproduce throughout the year. Skipjack is popular among consumers. It is generally the most affordable of the tuna species and usually sold canned.



Species name: Katsuwonus pelamis **Distribution:** Atlantic, Indian and Pacific Oceans (Tropical regions)
Proportion of global tuna catch: 57%* **Volume MSC certified:** 1,164,773 tonnes

YELLOWFIN TUNA

Yellowfin tuna can grow up to two metres in length and live up to 18 years. They mature by three years and can reproduce throughout the year making them highly productive. Juvenile yellowfin can often form schools with skipjack and juvenile bigeye tuna. Also known as 'ahi', yellowfin tuna is firm with a mild taste and can be canned or sold as fresh or frozen fillets.



Species name: Thunnus albacares **Distribution:** Pacific, Indian and Atlantic Oceans (tropical and subtropical regions)
Proportion of global tuna catch: 30%* **Volume MSC certified:** 349,902 tonnes

Glossary

Best practice score: A score of 80 or higher against a performance indicator in the MSC Fisheries Standard that results in a pass without requiring additional improvements.

Bycatch species: Unwanted catch that includes undersized or surplus fish for which fisheries do not have a quota, as well as endangered, threatened and protected species, and other unwanted marine species.

Conformity Assessment Body (CAB): Third-party certification body accredited to carry out assessments against the MSC Fisheries Standard.

Condition of certification: A requirement to achieve outcomes that increase a current performance indicator score to 80 or above (see also best practice score).

Conditional pass: Awarded to fisheries that achieve MSC certification but are required to make improvements to ensure all performance indicators meet global best practice (a score of 80 or above) within the five-year duration of a certificate.

Fish Aggregating Devices (FADs): Floating structures made from plastic or natural materials with hanging appendages to attract fish. These can be free floating (known as drifting FADs or dFADs) or anchored to the seabed (known as anchored FADs or aFADs).

Fish stock: The community from which catches are taken in a fishery. The term implies that a particular population is a biologically distinct unit.

Fishery Improvement Project (FIP): Multi-stakeholder initiatives that aim to help fisheries work towards sustainability.

Gear types: See page 31

Harvest Control Rules (HCR): Measures that require catch to be adjusted in response to stock changes.

Harvest Strategy (HS): The combination of monitoring, stock assessment, harvest control rules and management actions taken by a fishery to ensure the

target stock remains healthy and sustainable.

International Convention for the Conservation of Atlantic Tunas (ICAAT): The regional fisheries management organisation responsible for tuna in the Atlantic Ocean.

MSC Chain of Custody Standard: Certification to this Standard ensures an unbroken chain where certified seafood is easily identifiable, separated from non-certified products, and can be traced back to another certified business.

Performance indicators (PIs): 25 PIs sit under the three principles of the MSC Fisheries Standard (see Principles), and fisheries are assigned a score for each.

Principles: Fisheries in assessment are scored against the three core principles of the MSC Fisheries Standard: 1) Sustainability of the stock, 2) Ecosystem impacts, 3) Effective fisheries management.

Reference points: Biological reference points; stock status reference points used to define management action in response to stock status.

Regional Fisheries Management Organisation (RFMO): International bodies made up of representatives of nations with a shared interest in the management and conservation of fish stocks in a defined region.

Shark finning: The cruel and wasteful practice of removing the fins and tail of a shark and discarding the remainder of the body at sea. It is strictly prohibited within MSC certified fisheries.

Total Allowable Catch (TAC): Catch limits that establish the total amount of fish that can be taken from a stock. In tuna fisheries, all parties that target the same stock must agree how the TAC will be shared between them (quotas) and adhere to their share.

Western and Central Pacific Fisheries Commission (WCPFC): The regional fisheries management organisation responsible for managing tuna stocks across the Western and Central Pacific Ocean.





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Council**



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