

IN HOT WATER

Climate change will wipe out tuna profits in Indonesian waters unless investors support nine nature-positive actions

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EXECUTIVE SUMMARY

Tuna: too big to fail

Tuna are keystone species: they help define an entire ecosystem. Top predators in the ocean food chain, they move nutrients throughout the water column, thus fertilising phytoplankton, a key producer of the oxygen we breathe and absorber of the carbon dioxide we release. **For the ocean to be healthy, tuna populations need to be healthy too.** Yet they face major threats, from overexploitation to climate change.

With a 15% global volume share, **no country produces more tuna than Indonesia.** But out of the 791,000 tonnes of tuna caught in 2021 in Indonesian waters, the majority is overfished, subject to overfishing or harvested above recommended limits. Change is needed.

Revealing who controls the world's largest tuna fishing industry

Understanding which companies and investors hold the keys to the future of tuna in Indonesia required the identification of the ultimate beneficial owners of the local tuna fishing industry. Due to data limitations, this investigation focused on large-scale fleets (>60GT), which account for 39% of tuna production. Comparing each of the c.140,000 fishing occurrences recorded by Global Fishing Watch in Indonesian waters between January 2019 & September 2022 to tuna species distribution maps, Planet Tracker identified the large-scale vessels most likely catching tuna, and for each of them traced the ultimate beneficial owner.

Out of a total of 136 different ultimate owners, of which five are publicly listed, **10% control an estimated 70% of the tuna** harvested in Indonesian waters by industrial fleets tracked by Global Fishing Watch. All owners of Indonesian-flagged vessels are located in Indonesia, mostly in Jakarta or Denpasar.

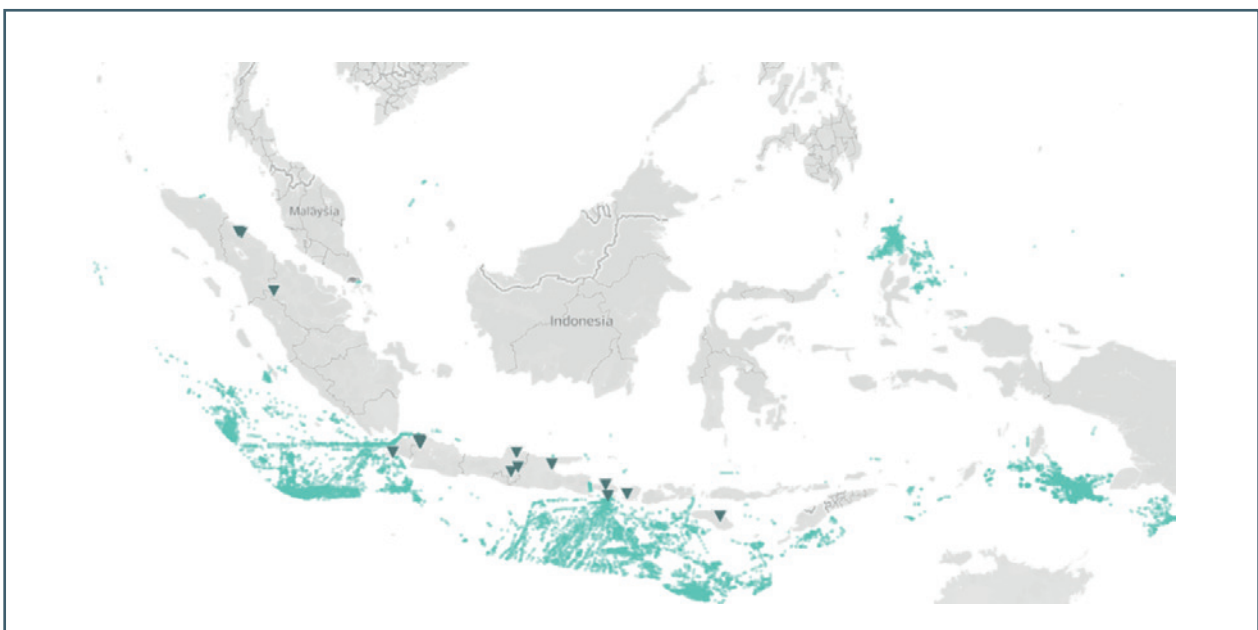
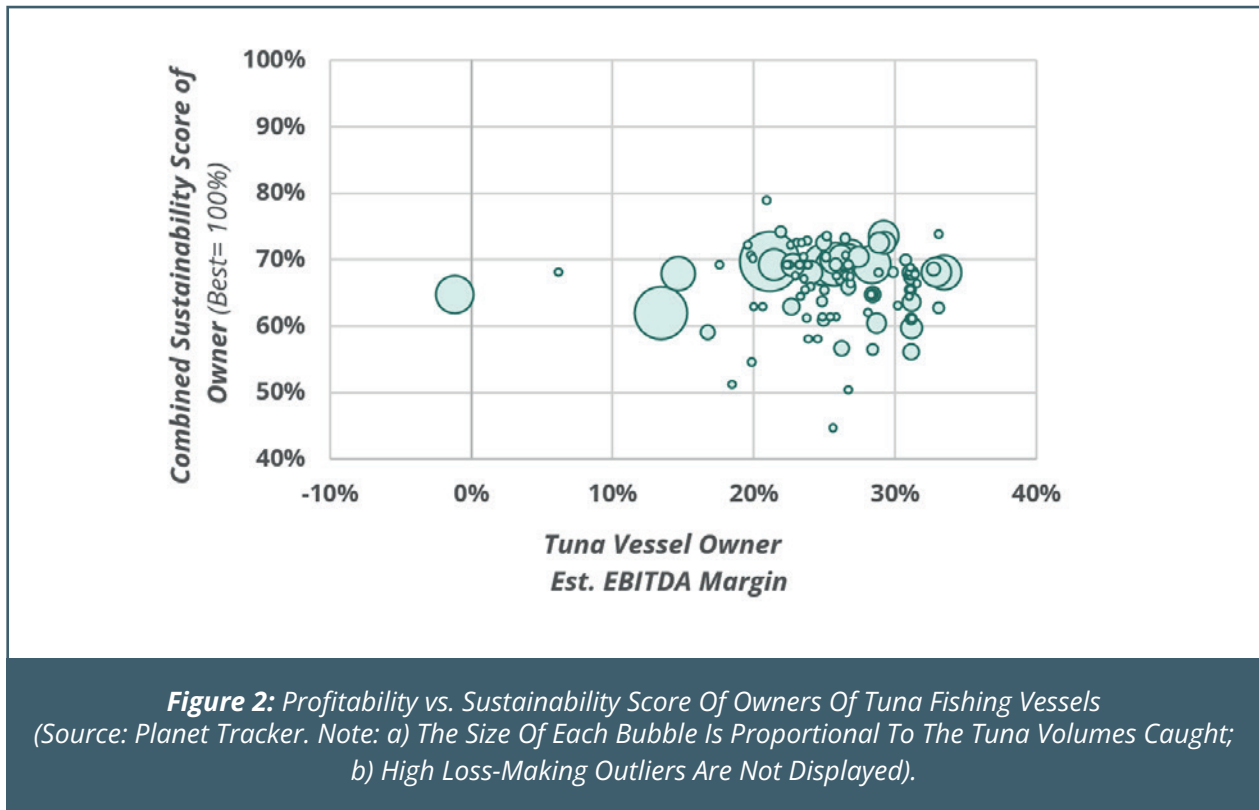


Figure 1: Tuna Fishing Events By Industrial Vessels In Indonesian Waters (Dots) and Registered Addresses of Vessel owners (Triangles) (Source: Planet Tracker, based on Global Fishing Watch and Indonesian Government data, Jan. 2019-Sep. 2022).

Transparency is poor: none of the 136 entities disclose the volume of tuna they catch. Three of them were accused of allegedly engaging in IUU² fishing in the past, and one of them was accused of forced labour.

Companies that are doing good are doing well

Having scored the sustainability of each tuna vessel, Planet Tracker researched the financials of each of their owners. Contrary to a popular opinion, the least sustainable companies were not found to be more profitable. And encouragingly, **the profitability of those companies ranking top for sustainability was in line with or above the average.**



Climate change to wipe out the industry's profit

With an estimated EBITDA margin of 12%, fishing tuna in Indonesia is a reasonably profitable business, although considerably less so than, e.g. the more sustainably managed Alaska pollock fishery, one of the largest globally (see [Pollockonomics](#)). And **without fuel subsidies, it would be heavily loss-making.**

Yet that relative financial health is at risk: comparing the probability of occurrence of each tuna species between now and 2050 under two climate scenarios (RCP³ 4.5 and RCP8.5), Planet Tracker calculated that the industrial tuna fishing fleet operating in Indonesia will catch between 25% and 31% less tuna by 2050 compared to 2022.

2 Illegal, Unreported and Unregulated

3 The Representative Concentration Pathway (RCP) is a greenhouse gas concentration trajectory used by the IPCC

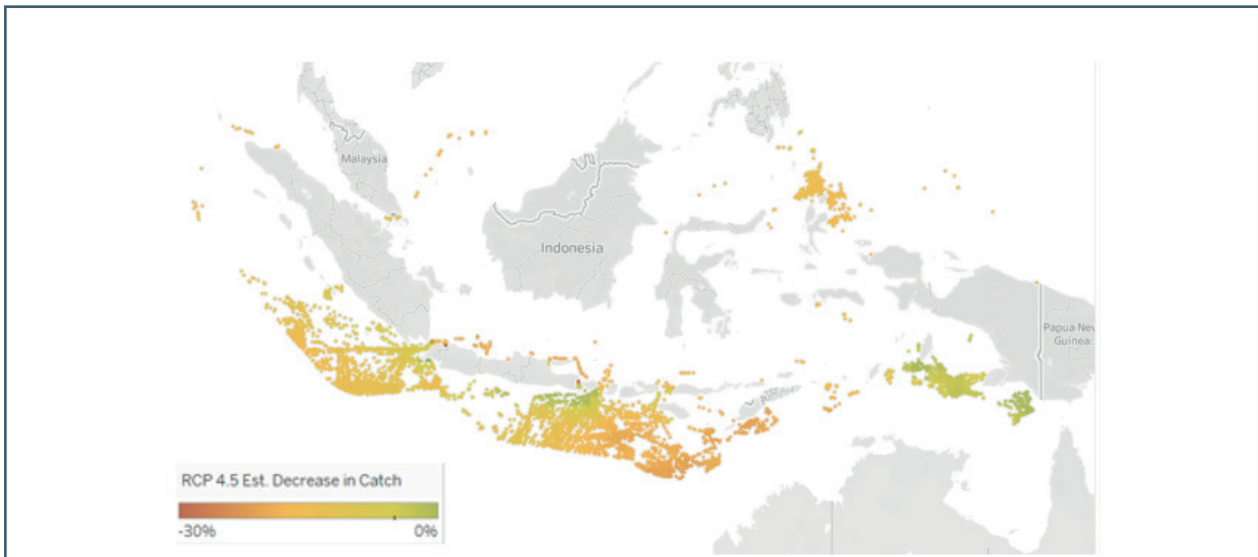


Figure 3: Estimated Decrease in Catch Attributable to the Changing Distribution of Skipjack and Yellowfin Tuna Due to Climate Change under RCP Scenario 4.5 Compared to Current Values (Source: Planet Tracker, Based On AquaMaps)

As a result, **the industry's revenue is likely to drop by c. 30% by 2050** compared to current levels (everything else being equal, i.e. excluding any price increases or technology-related efficiency gains). Depending on the industry's and the government's reaction, this is likely to lead to a **near or total disappearance of the industry's profits.**

Investors need to support nine nature-positive actions to rebuild profits

Avoiding that outcome is possible, by investing in nature. The 136 owners identified by Planet Tracker could more than offset the toll the climate crisis will have on their profits by taking the nine following concrete actions:

1. **Reduce pressure on overexploited tuna stocks⁴** by at least 20%.
2. Adopt a **responsible drifting FAD⁵ policy.**
3. Invest in GDST⁶ - compliant **tuna traceability.**
4. Enable supply chain transparency by **disclosing the volume of species caught.**
5. Choose **selective fishing methods** to reduce bycatch.
6. **Retain all fished tuna**, except those unfit for human consumption.
7. Participate in **sustainable tuna fishing initiatives**, such as [AP2HI⁷](#), [ATLI⁸](#), Fisheries Improvement Projects (FIP) or [Marine Stewardship Council \(MSC\)](#) certification.
8. Replace crude palm oil by **used cooking oil** as a feedstock for biodiesel.
9. **Link their financial health to the environmental health** of the fish populations they rely on and take action to improve both.

Whilst implementing these recommendations will require a short-term investment, together they will help long-term EBITDA be 16% higher, despite the severe impact of climate change.

4 Bigeye tuna and yellowfin tuna in the Indian Ocean
5 Fish Aggregating Devices: man-made, typically floating wooden structures with hanging nets to attract fish.

6 Global Dialogue on Seafood Traceability, an organisation that set standards for seafood traceability to enable interoperability across supply chains

7 The Indonesian Pole & Line and Handline Tuna Fisheries Association

8 The Indonesian Tuna Longline Association

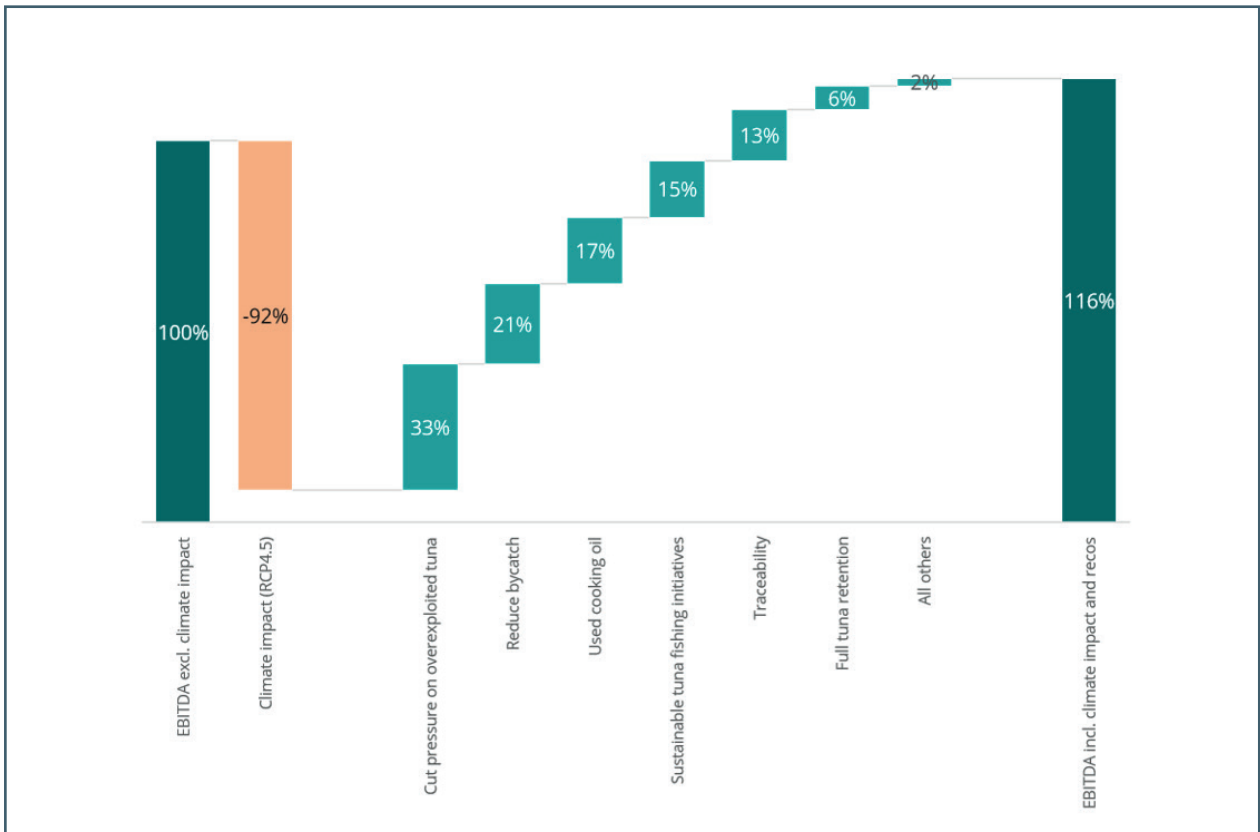


Figure 4: Impact of Climate Change (RCP 4.5 Scenario) and Planet Tracker Recommendations on Long Term EBITDA as a % Of 2050 EBITDA before Climate Impact

To reach these conclusions, a combination of third-party data, in-house modelling and on-the-ground research was used. Our methodological approach is summarised below. Read the [full report](#) here.

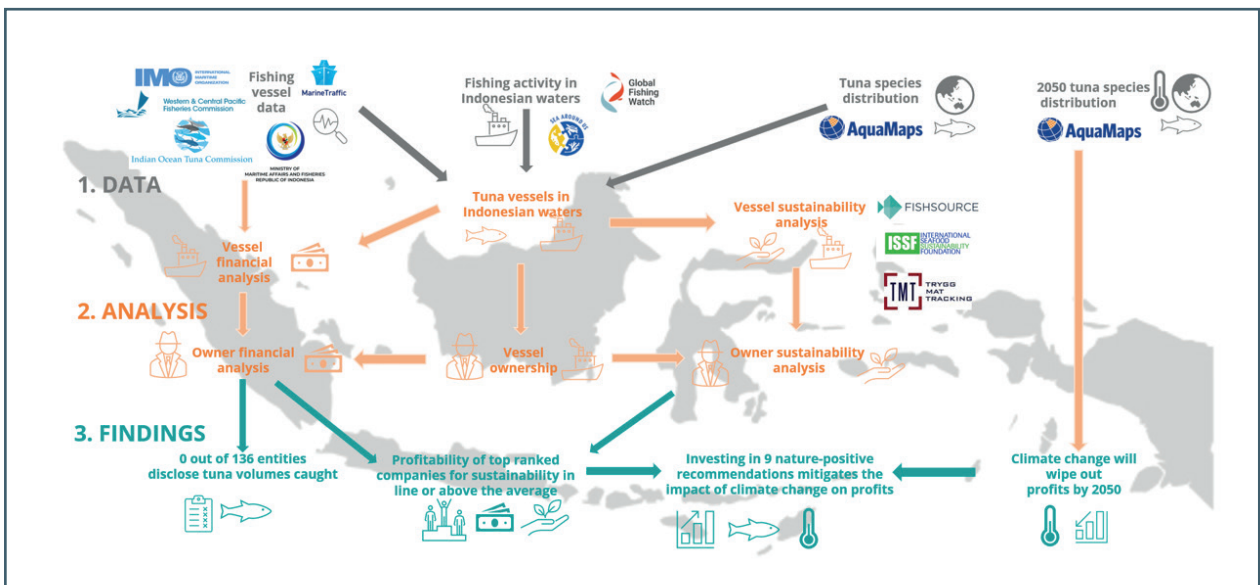


Figure 5: How Planet Tracker Investigated the Indonesian Tuna Fishing Industry (Source: Planet Tracker, Logos Indicate Key Third Party Data Sources Used)



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