



# Solving Overcapacity in Eastern Pacific Tuna Fisheries

Overcapacity in fishing fleets is a serious global problem that undermines the health of fish populations and the businesses that depend on these fisheries. Overcapacity is particularly evident in the purse seine sector targeting tropical tunas in the Eastern Pacific (EP), whose management is under the auspices of the Inter-American Tropical Tuna Commission (IATTC). The World Wildlife Fund Inc. (WWF) recently completed a study on the costs of overcapacity and methods to address this issue. The study analyzed the economic costs and benefits of eight capacity reduction programs. It will be used by IATTC in its preparation of a plan of action for EP tuna fleet capacity management. This fact sheet summarizes the study's results for solving overcapacity. The complete WWF study is available upon request.

## SCOPE of the Problem

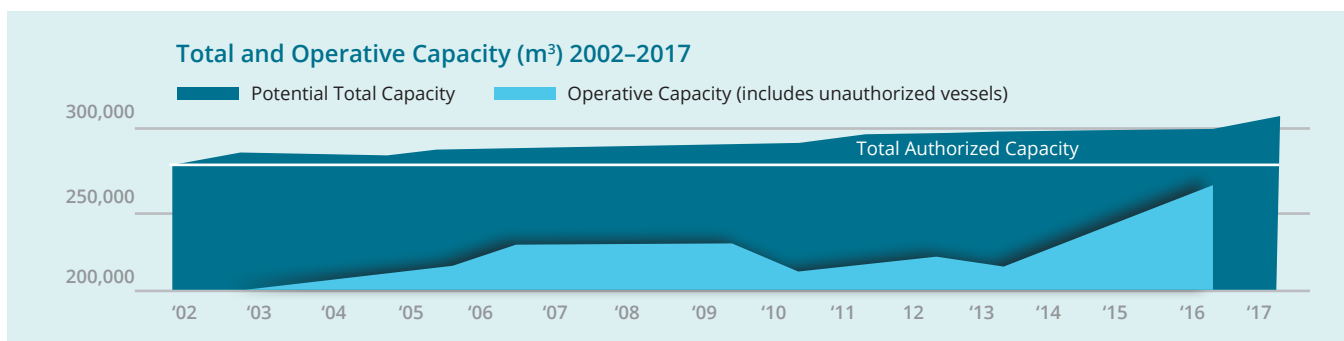
The substantial growth of fishing capacity of the tuna purse seine fleet operating in the Eastern Pacific in the last two decades has led to a current fleet capacity that is considerably in excess of the IATTC set target level of 158,000 cubic meters (m<sup>3</sup>) of well volume. In 2016, the total operative capacity was 264,859 m<sup>3</sup> and potential total capacity was 296,415 m<sup>3</sup>.

Excessive capacity affects the ecological health of the EP tropical tuna stocks, and also has a negative impact on the profitability of the industry, conservatively estimated at \$47 million annually. The overcapacity problem is expected to become worse as more efficient vessels replace existing ones and latent capacity becomes active, which will require continuous increases in the seasonal closure.

## Steps for getting to optimal fleet size in the shortest timeframe

- **Individual transferable quota (ITQ) approaches.** ITQs result in reduced fleet capacity (211,000 m<sup>3</sup>) that is above the IATTC optimum, but can be combined with other programs or redesigned to achieve the optimum.

The eight capacity reduction programs chosen for the WWF study were selected by the study team from reviews of relevant proposals submitted by Commissioners of the IATTC, and recommendations from meetings held under IATTC auspices and the project's advisory committee.



## Engaging Industry

The study's analyses and technical reports were prepared by Northern Economics Inc. whose principal researchers worked closely with technical staff at the IATTC and vetted near final results with members of the purse seine fleet in Ecuador and Mexico. Industry also participated in the study by providing data for analysis and input on assumptions.

- **Industry-funded vessel buy-backs.** Analysis under different scenarios showed that post buy-back vessel revenue increased even after accounting for the repayment of a buy-back loan. For long-term effectiveness, buybacks need to be combined with other programs to continue the capacity reduction process or to prevent the build-up of capacity after the buyback. As with buy-backs, side payments can also be used to settle disputes or reach agreement on a long-term capacity reduction measure.

## Steps that Take a Gradual Approach to Capacity Reduction

- **Members' choice.** Due to the diversity across members of the IATTC, one proposal examined the option of giving members themselves the choice of any method to reduce operative capacity by ten percent per year until the fleet achieves its optimum.
- **Uniform limits.** In combination with improved monitoring on the vessels and at the processing plants, uniform limits on small bigeye and yellowfin tunas for all vessels will constrain the least number of purse seine vessels.
- **Reduced capacity of replacement vessels.** The Japanese delegation presented a proposal to the IATTC that recommends additional removal of capacity whenever there is a request to reassign capacity on the IATTC Vessel Register. Japan's proposal (Prop-H-

2-JPN) will slowly decrease both the technological and actual vessel hold capacity. A modified proposal that would require new vessels to "retire" 40 percent of its equivalent capacity on the vessel register will reduce capacity to the optimum in 23 years.

- **Pilot programs.** Recognizing that some adaptations will be required to change behavior, the study also analyzed pilot programs on IVQs (transferable) and voluntary capacity reduction. The latter includes incentives such as reduction in the length of the closed season for member countries taking steps to reduce fleet capacity, with compensation paid by vessel owners benefiting from the shorter closed season to those who choose not to fish. Pathways to reform could incorporate such pilot programs, which once implemented would be modified and expanded using a stepwise approach to full adoption. Apart from incentives, improved accountability would be part of the pilot programs. Participants in a pilot IVQ program, for example, would have an exemption from the closed season and operate under increased monitoring. Similarly, vessels operating under a voluntary capacity reduction pilot program would receive the appropriate reduction in the closed season, and vessel owners not fishing would receive some compensation.

## NEXT STEPS: Flexible Pathways to Reform

While the study examines proposals separately, it is clear there are different pathways to reform that can utilize a combination of these scenarios appropriately sequenced. The IATTC can make progress by adopting one or more of these proposals or build off analyses and adopt modified versions in its plan of action to manage fleet capacity in the Eastern Pacific. In addition, these assessments can be useful to other tuna producing regions grappling with problems of overcapacity.

## FOR MORE INFORMATION:

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**For a full copy of the GloTT report, go to:**

<https://www.worldwildlife.org/projects/incentivizing-sustainable-fishing-on-the-high-seas>