Fish 2.0 Market Report:

Tuna

An Investor Update on Sustainable Seafood

Tuna: Opportunities in a Transitioning Industry

The tuna catch represents a $10 billion industry and is one of the top 5 most consumed seafood species globally. Tuna is a stable commodity: over 86% of tuna comes from healthy stocks, which have grown at a steady rate over the last 30 years.

The global tuna industry is in the midst of a paradigm shift due to increased production competition, technological innovation and changes in consumer demand.

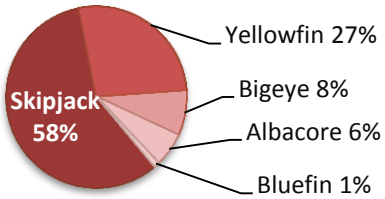
Investment opportunity focus areas include:

- **Supply chain disruption:** Papua New Guinea is building significant new canning and processing capacity, which, when in place, will rival that of Thailand, currently the largest processor of tuna in the world. Once this is in place, some suppliers and buyers will likely shift to PNG, changing trade flows and price competition.
- **Technology improvements:** The $4.25 billion sashimi tuna market is shifting in its preference to using frozen rather than fresh fish for sushi. This shift in market preference is requiring improved technologies to flash-freeze fish and stably transfer it across the globe. Traceability technologies are also highly sought after in tuna markets.
- **New market growth:** Middle-class consumers in Australia, Latin America and the Middle East are increasing their intake of canned tuna products. The current import value of canned tuna to these three regions is $1.2 billion. Over the last 3 years, Australia's market has grown at a rate of 30% annually, and Latin American countries have averaged over 20%.

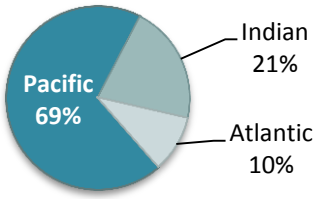
Tuna by the Numbers

- The global tuna industry, valued at $10 billion, represents 8% of all international seafood trade.
- 86% of tuna is caught from healthy stocks, and it is considered among the top five seafood species consumed globally.
- The total catch of tuna was 4.6 million metric tons (MT) in 2013.
- There are over 40 tuna species, but only five are commonly consumed: skipjack, yellowfin, bigeye, albacore and bluefin.
- Skipjack composes 58% of this total catch, most going to canning.
- Valuable bluefin tuna makes up only 1% of total catch, and is mostly destined for the Japanese sashimi market.
- More than two-thirds of tuna originates from the Pacific Islands.
- Thailand is the leading processor, exporting both canned and cooked tuna for overseas processing.

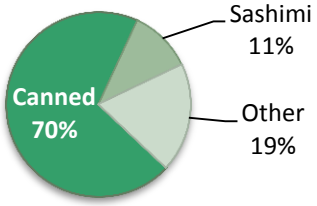
Tuna Species



Ocean Origin



Tuna Products



Tuna Is a Valuable, Stable Commodity in Consistent Demand*

- **Steady supply increase.** Overall supply growth is steady, increasing by 100,000 MT/year, or 2%. Tuna's steady supply compares favorably to that of other seafood products trading in similar volumes (such as anchovy and salmon), as high variability and uncertainty characterizes these stocks. There have been only 4 negative years for tuna supply growth in over 30 years.
- **Developing economies are playing a larger role.** South East Asian, Latin American and Oceania countries have increased their supply to the global marketplace, aided by industry subsidies aimed at capturing more of the value within their exclusive economic zone (EEZ).
- **Price volatility.** Despite steady supply and demand, tuna canned goods prices are volatile, fluctuating between USD $1,150 and $2,000/MT over the last 3 years. Crude oil price swings (oil can contribute up to 30% of fishing costs) and short-term supply bans to preserve stock sustainability in part drive this volatility.
- **Growth in "emerging middle class" consumption.** Oceania, Latin America and the Middle East offer ample growth opportunities for canned tuna, a nonperishable protein source.
- **Demand for sustainable consumer products.** While a few companies control approximately 80% of the tuna canning market, sustainable-focused brands, which are gaining market share in mature consumption economies such as the EU and US, increasingly fill the remaining segment.

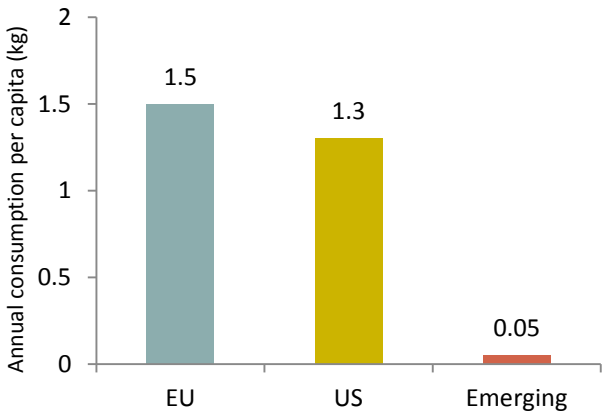
*The industry dynamics highlighted in this paper draw from multiple sources, including many market insights by Gorjan Nikolik of Rabobank International made at the 5th European Tuna Conference, April 2015.

Opportunity in Canned Tuna: Consumption in New Markets

Opportunities exist for new market development and entry

- Canned tuna is an affordable and competitive protein product for the growing number of middle-income consumers in developing countries, and ideal where transport and storage infrastructure are poor.
- There is high growth potential in these emerging countries, which only consume 0.05kg per capita per year, in comparison to the EU at 1.5kg and US 1.3kg.
- Nearly every EU or US tuna canner is experiencing its highest sales growth outside its core geographic markets.

Canned Tuna Consumption Per Capita



Source: FAO, Globefish

Increase in Regional Processing Competition Is Shifting Trade Flows

- New processing capacity in Papua New Guinea (PNG) is expected to disrupt current trade flows, create jobs in the Pacific Islands and increase competition for raw materials.
- Thailand is currently the leading processing center for canned tuna; the country processes 46% of the total canned tuna trade flows, relying mostly on Pacific sources. (See page 4: Current Global Tuna Trade Flows.) PNG is installing significant processing facilities that will yield nearly the same capacity as Thailand.
- Major tuna buyers and brands are closely monitoring the developments in Thailand and PNG, as this industry shift will likely put competitive pressures on Thailand's exports to major markets, such as the EU and US.
- The ability to process tuna within the Pacific Islands can potentially shorten supply chains, improving quality, creating social and economic benefits for the Pacific Islanders, and allowing differentiation of Pacific Island products in the marketplace. This could result in improved incentives for sustainability among the Pacific Island nations with large tuna fisheries in their waters. Currently the Pacific Island countries in whose waters the tuna are captured retain very little of the value of tuna fisheries.

Opportunity in Sashimi Tuna: New Technologies and Growing Demand Catalyze Industry Growth

Technologies that improve preservation and logistics hold significant value

- Buyers source tuna for the sashimi markets globally. There is a trend among Japanese buyers toward frozen loins rather than fresh tuna, due to the former's better storage life. This preference means that freezing and supply chain improvement technologies are increasingly critical to the market.

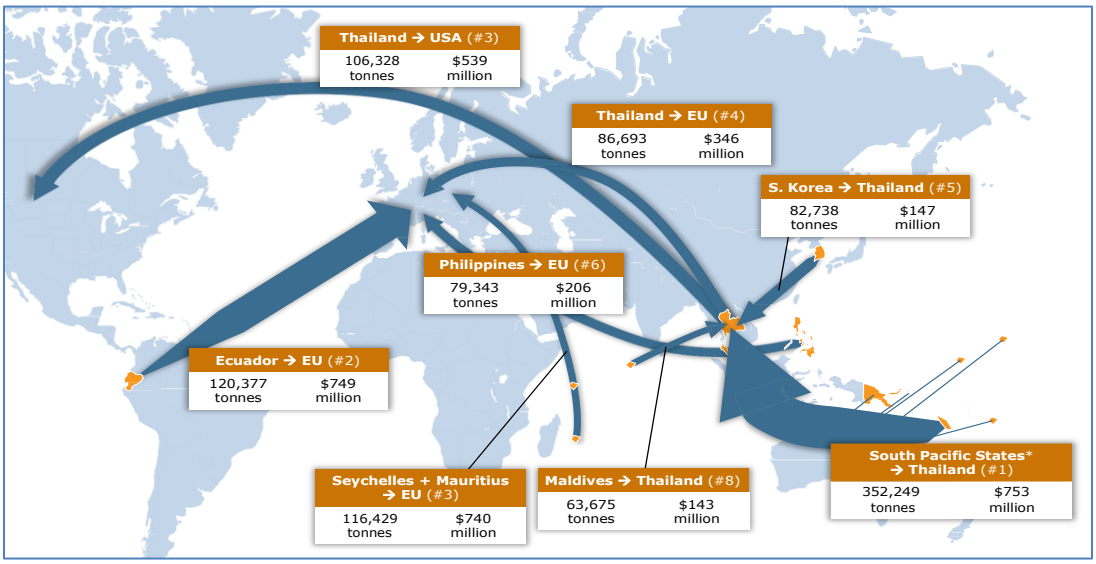
Demand is increasing and shifting

- Japan's population dominates global consumption, eating more than 80% of the 500,000 MT of tuna caught annually for sashimi.
- Demand in other countries is also increasing: in 2013, imports of bluefin tuna to the US from Japan grew from 4 MT (Q1 2013) to 171 MT (Q2 2014) due to sushi restaurant demand.

Emergence of new sources increases supply

- Development of new sources through aquaculture, such as bluefin tuna ranching, occurring primarily in Europe, produces an estimated 35,000 tons. This is expected to cause price weakening in bluefin markets in Japan, and may impact bigeye and yellowfin tuna markets as well.
- If stocks of wild Atlantic and Mediterranean bluefin tuna remain threatened, then products from ranching may be able to help shift demand. Impact investors should note that the industry will make sustainability gains when it can breed bluefin tuna in hatcheries, instead of capturing them in the wild and then growing them to full size on ranches

Current Global Tuna Trade Flows



Source: Gorjan Nikolik, Rabobank

Sustainability's Growing Role in This Changing Marketplace

Global tuna stocks are strong: 86% of the 4.6 million tons of tuna caught in 2013 were from healthy stocks.

- Environmental organizations that rank seafood sustainability generally consider most skipjack stocks strong and well managed. Albacore stock sustainability varies by geography, and bluefin tuna stocks are in need of careful management globally.
- Regional fishery management organizations (RFMOs) manage tuna stocks. RFMO members are countries that share an interest in managing fish stocks in their respective areas. RFMOs can set catch limits, regulate the right to fish and call for short-term supply bans or gear restrictions. Five tuna RFMOs manage 91% of the world's oceans.
- The International Seafood Sustainability Foundation (ISSF), whose members include major industry players and environmental NGOs, is the leading tuna management organization.
- Consumers and retailers are increasingly concerned about overfishing and illegal unreported and unregulated (IUU) fishing. Businesses able to incorporate traceability and sustainability information into their products are likely to capture opportunities in the EU and US marketplaces.

Trade Policy Has a Significant Impact on Tuna Markets

- IUU documentation is required for EU imports to support stock traceability. In recent times, the EU has used IUU to improve management and compliance by "yellow-carding" noncompliant countries. A yellow card stops trade if the country does not make improvements by certain dates. The US is expected to develop an IUU policy in the near future.
- Currently, the EU charges tariffs of 24% on imports of canned tuna, the US charges 12.5%, and Japan and Australia have no tariffs. Thailand is pushing for additional free trade agreements with the EU, which could change price and trade flows.

Key Sources:

- ISSF Tuna Stock Status Update, 2015: Status of World Fisheries for Tuna
- ISSF Technical Report 2015-03.ISSF, Washington, D.C.
- Forum Fisheries Agency (FFA): Market and Industry Dynamics in the Global Tuna Supply Chain, June 2011.
- Gorjan Nikolik, Rabobank International, European Tuna Conference, April 2015
- FAO—Globefish: Word Tune Markets, vol. 74 (www.globefish.org)
- Tuna-org.org; seafoodwatch.org; iucn.org

Fish 2.0 Contacts

Monica Jain
Executive Director

monica@fish20.org

Prepared by Fish 2.0 Team Members
Alexandra Jostrom and Rachael Edwards