

# The Seafood Database

## The Good, the Bad, and the Fishy

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**Planet Tracker's Seafood Database has been further expanded to cover 300 corporates along the global seafood supply chain, providing investors with a unique open-access tool to identify those most exposed to overfishing, illegal fishing, and other seafood sustainability risks.**

These risks are financially material: this analysis shows a positive correlation between a company's reliance on sustainable fish stocks and its profitability, whilst profit margins tend to decrease with greater reliance on overfished stocks.

However, despite an improvement, disclosure is still poor, especially for large, listed companies. Fishing companies, in particular, do not disclose enough, preventing transparency for companies further down the supply chain.

Improved sourcing transparency is in the interests of both investors and corporates, not least because regulation will rapidly push companies toward more sustainable action.



# What's new?

## Planet Tracker's Seafood Database: seafood sustainability data for financial institutions

Seafood sustainability data is notoriously fragmented and hard to access. And yet, that data is a **critical driver of the financial performance of ocean-dependent companies**. For instance, Planet Tracker found that *companies engaged in the sustainably managed Alaska pollock fishery boasted very high margins*, contrary to the *low profitability of the Chinese distant-water fishing fleet* (often embroiled in environmental and social scandals). We also found that *companies doing good are doing well in the Indonesian tuna sector*, that *IUU fishing is a serious financial risk* and that *French retailer Carrefour generated its lowest margins on the most overfished species*.

To **empower everyone to assess overfishing risks and other ocean-related sustainability data at seafood-exposed companies**, Planet Tracker is releasing the second version of our *Seafood Database*.

This interactive database enables users to filter through corporates within the *USD 1.8 trillion seafood supply chain* and to compare their exposure to overfishing, illegal fishing, and many other financially material ocean sustainability risks, all in one place, on an open access basis.

## Coverage tripled to 300 companies

Browsing through the 50 indicators we compiled for our universe of 300 corporates (up from 100), users can rank and benchmark companies, compare their financial health to their environmental sustainability, and/or find more information on the areas where they operate (through 136 country-level indicators), or the species they catch, farm, process or retail.

# The big picture

## 300 seafood-exposed companies across the whole supply chain

The 300 companies in our [database](#) have a high exposure to seafood or account for a significant share of the seafood market.

These companies are not only engaged in upstream (fishing or aquaculture), midstream (processing), or downstream activities (wholesale, retail), but also in auxiliary activities such as fish vaccination, construction of engines for fishing vessels, manufacture of fish processing machinery, etc.

## The global seafood supply chain is controlled by richer countries

183 of the 300 companies covered are headquartered in high-income countries, and 297 in high-income or upper middle-income countries, defined as per World Bank's GNI per capita criteria. This suggests that the global seafood supply chain is controlled by richer countries (Note: some companies in our database are large subsidiaries of companies/groups also listed in our database, so there is some double counting when it comes to assessing control).

More than half of the 300 companies are headquartered in Japan, China, the US or Norway.

*Table 1: Number of companies in the Planet Tracker Seafood Database by country of headquarters.  
Source: Planet Tracker.*

Japan	57	Australia	6	Lithuania	1
China	53	Iceland	5	Lithuania	1
Norway	32	Netherlands	4	Singapore	1
USA	20	France	3	Mexico	1
Vietnam	15	Ecuador	3	Romania	1
Indonesia	12	South Africa	3	Greenland	1
Denmark	10	New Zealand	3	Ireland	1
UK	9	Italy	3	Taiwan	1
Spain	9	Canada	3	Switzerland	1
Chile	8	Germany	2	Faroe Islands	1
Thailand	7	Peru	2	Finland	1
South Korea	7	Malaysia	2	Belgium	1
Russia	7	Philippines	2	India	1

## Sourcing from all over the world

In contrast, companies in our database source their seafood from all over the world. There is therefore a discrepancy between where natural capital is located (globally), and who controls access to that capital (companies in richer countries).

See below sourcing locations as disclosed by companies, or click [here](#) for an interactive version of this map.



*Figure 1: Sourcing locations for the 300 companies in our database (in cases the location is a country or an ocean, the centre of the country/ocean was used).*

## Sourcing more than 1,000 different species

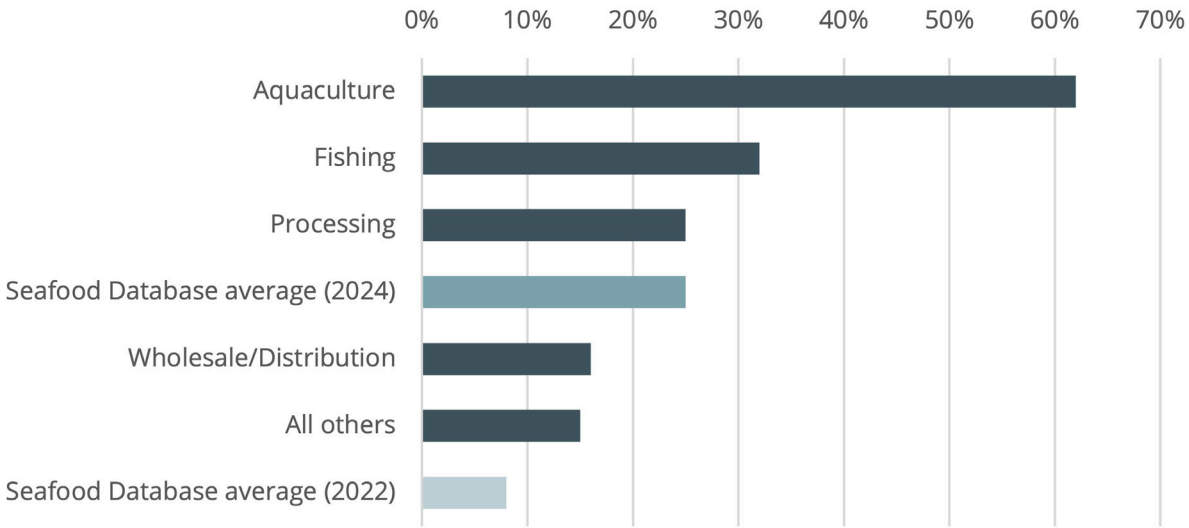
There are 1,481 different 'species' sourced by companies in our [database](#), but only 1,005 of them are actual species (i.e., identifiable by their scientific name). The rest are either families or groups of species, commercial names, or even broader categories such as "Molluscs" or "Finfish" that could include many different species.

To assess overfishing risk and other natural capital risks specific to seafood, species information needs, at the very least, to be coupled with geographic information. The same species can, for instance, be overfished in some areas, but not in others. That is why we have analysed where companies in our database source their seafood.

# Sourcing transparency has improved but is gatekept by upstream companies

Among companies that disclose some information on species, the level of granularity is still sub-optimal, but significantly better than when the Planet Tracker Seafood Database was first launched, in December 2022.

Back then, only eight companies (8%) disclosed enough information to allow us to determine the exact species they handle/farm/catch/sell for their entire portfolio (referred to as “full portfolio species disclosure”). That proportion is now 25% (77 companies out of 300). It reduces as we progress further down the supply chain:



*Figure 2: Proportion of companies by stage of the supply chain for which Planet Tracker was able to determine the exact species for the entire portfolio*

62% of companies primarily involved in aquaculture have reached full species disclosure in their portfolios. While encouraging, this is also expected as companies farming seafood know exactly which species they harvest. It is also by no means easy for anyone to find species information, it often requires translating from local languages and deducing the exact species based on indicators such as farm location.

Within fishing, only 32% of companies reached full disclosure. This has repercussions throughout the supply chain, since processors, retailers and foodservice companies can only disclose as much information as they secure from their suppliers.

Moving downstream to processing companies, only 25% of companies reached full portfolio species disclosure. That proportion comes further down to 16% at wholesalers and distributors.

**Because biodiversity risk is often species-specific, this limited transparency prevents an accurate assessment of risks and opportunities for investors and lenders. They should engage with companies to improve that level.**

### **Box 1: How we attributed species to each company**

Species disclosure is not consistent across companies. Some refer to 'tuna', some to 'skipjack', most use commercial names for fish rather than actual names, and many use other languages than English. To attribute correct and homogenous species information to each species with the most granularity possible, we have followed the steps below:

- Manual scan of company websites and annual reports
- Listing of any indications on seafood species
- Creation of a tier-based classification of all seafood species, from the least granular (Category – e.g. Fish) to the most granular (Species, identified by their scientific name)
- Matching of each of the “species” listed on companies’ website to a specific tier level and the corresponding value (e.g. fish, finfish, tuna, bluefin tuna, Atlantic bluefin tuna).

### **Few companies disclose the origin and species of their fish with a high granularity**

To measure the granularity of disclosure by species and geographies at companies, we have created a reporting precision score, ranging from 0 to 100%. The higher the score, the more granularity there is on the geographical origin and the exact species of the seafood sourced (the exact calculation is the result of 1 divided by the logarithm of the number of potential country and species combinations based on the disclosure provided).

A score of 100% (the maximum) indicates that the exact species and exact country is provided by the company for its entire portfolio. Every company should reach that score. However, this is far from the reality.

Out of the only twenty companies that have a reporting precision score of 95% or above, all but one are primarily engaged in aquaculture (where knowing the exact species and location is incredibly easy). The only one engaged in fishing (Hamada Suisan) is focused on the catch of one family of species: sardines.

For every activity except fishing and aquaculture gear equipment, the average precision score of the companies engaged in this activity is similar. This is surprising since one would expect to find more granular disclosure at aquaculture and fishing companies than at companies further downstream.

*Table 2: Average reporting precision score by activity and top 3 companies with highest score.*

Activity	Average precision score	Companies with best score
Fishing and Aquaculture Gear Equipment	75%	Murray Cod Australia Ltd; Nichimo Ltd; Hagoromo Foods
Fishing Vessels	82%	Nordlaks Holding AS; Yaizu Tuna Fisheries; Empresa Pesquera Eperva SA
Feed	81%	Atlantic Sapphire; International Development & Investment Corp; Mowi ASA
Aquaculture	84%	Nova Sea AS; Norcod AS; Proximar Seafood AS
Fishing	82%	Hamada Suisan; Hubei Fisheries Group Ltd; Albacora Group
Processing	82%	Ichimasa Kamaboko Co Ltd; Thai Union Group; PT Nutrindo Fresfood
Wholesale/Distribution	82%	OUG Holdings Inc; Seaborn AS; FCF Co Ltd
Foodservice	80%	Tokyo Ichiban Foods; Daisyo
Other	81%	Nam Viet Corp; Sinkaberg-Hansen AS; Pacifical

**Greater species disclosure is needed, especially at publicly listed companies**

In the case of a natural capital event impacting a company, it is likely to affect one or multiple species in one or multiple geographies, not all of them. In this case, investors will want to know the revenue or ideally profit exposure of the company to the event. So it is concerning and counter-intuitive to see that publicly listed companies are on average significantly less transparent about their sourcing (average reporting precision score: 80%) than privately owned companies (average score: 89%).

An exposure to many species in many geographies can be deemed safer, but there is a risk that many, most, or even all of the species are e.g. overfished, vulnerable to one common disease, or impacted by climate change. Only species disclosure could reveal that possible risk.

More information on each species (e.g. consumption and production data, conservation data, harvest by gear, etc.) can be found by clicking on species names in [the database](#).

Once this information is available, investors can then estimate other risks, such as overfishing or illegal fishing risks.

# Estimating and reducing overfishing and IUU fishing risks

We have assessed multiple natural capital risks associated to each company in our database, with a focus on overfishing and illegal fishing (our database is not currently optimised to assess aquaculture-specific risks).

To do so, we created company scores by pairing third-party data on fish stock or country (e.g. fish stock health or share of unreported catches) with the estimated exposure of each company to this stock or country, based on the species and geographic origin disclosure described earlier. Given the low quality of disclosure, these estimates are not optimal, but the best we could compute at the moment. If a user has better data, they can [\*submit this information to the Planet Tracker Seafood Database\*](#).

## How to assess overfishing risk

To estimate the overfishing risk at companies, we recommend users to look at:

- The 'FishSource - Current Stock Health' score: the simple average of the scores provided by [\*FishSource\*](#) measuring the current health of fish stocks to which we estimate the company is exposed to, expressed as a percentage, where 100% is the best possible state, and any number below or equal to 60% indicate the stock is overfished. The same indicator exists for future stock health.
- The 'Global Fishing Index - Proportion of 1990-2018 catches that is overfished' indicator: this is the simple average of the proportion of 1990-2018 catches that comes from fish stocks that are below a level of abundance that enables maximum sustainable yield in each country we estimate the company is exposed to, based on the [\*Global Fishing Index\*](#) data.

These indicators are not optimal, since a) they use country-based estimates, b) they rely on correctly estimating the area and species harvested, and c) they ignore any specific initiatives taken by the companies, for instance a commitment to only source MSC-certified fish. They should therefore be seen as indicators of risks only. However, there is currently no better source of company-specific overfishing risks available for investors.





## Company Insights

Back to Default Metrics

Filtering to: 31 / 300 Companies

Select other metrics

Hover over the x axis below each bar chart to sort companies. Select a company to view sourcing information. Return Home to select different companies.

Please note that all metrics below are estimates. Go back to our website to read our methodology.

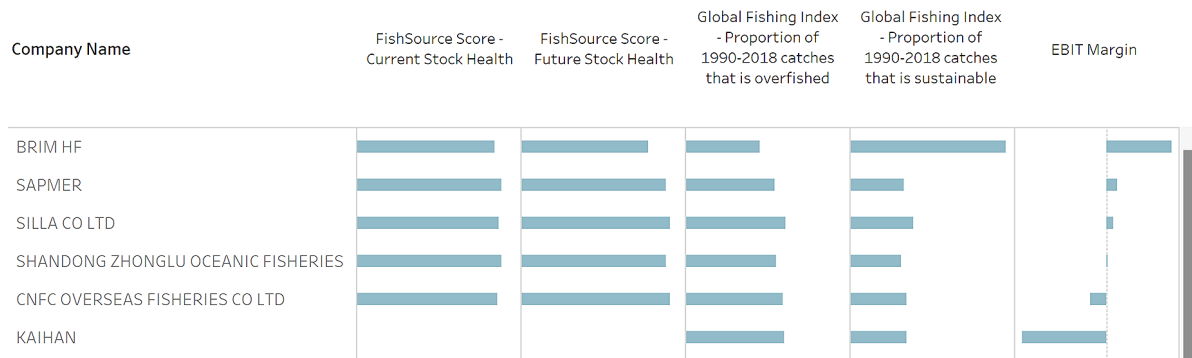


Figure 3: Comparing Overfishing Risks at a few Companies in the Planet Tracker Seafood Database.

Companies with the highest estimated overfishing risk in our database include Grupo Profand (ticker: 2337386Z), Ichimasa Kamaboko (2904), and Yonkyu (9955). As per above, this does not mean that these companies contribute the most to overfishing though, simply that they are worth assessing further (if possible). For instance, Grupo Profand discloses that 43.2% of its wild-caught seafood is certified or come from a FIP, but it is hard to assess how overfished the remaining 56.8% is.<sup>1</sup>

### How to assess IUU fishing risk

To estimate the risk of illegal, unreported and unregulated (IUU) fishing, we encourage users to look at the estimated share of unreported catches at the company, built by combining the company's geographic and species exposure with the *Sea Around Us* estimates of unreported catches by region and species. The source data was not constructed to measure IUU fishing risk but instead to estimate catches that were underreported and therefore provide a truer picture of global fisheries. Users should not rely solely on this indicator, but the availability of volume estimates of unreported by catches by species and country makes it a better alternative to proxy company-specific IUU risk than other IUU fishing indicators that are only country-based in our opinion.

A better assessment of a company-specific IUU fishing exposure can be made via [our IUU Fishing Detection Toolkit](#), but will require more time.

<sup>1</sup> <https://profand.com/en/annual-report-esg-2023/>

## How to assess other risks and dependencies

There are many more company indicators in our database, which measure for instance:

- **Impact on habitat:** for this we use the simple average of the proportion of catches harvested by bottom trawlers and gillnets in each country and for each species we estimate the company's exposure, based on Sea Around Us data. We picked these two fishing methods as they were recently singled out as most meeting the scientific definition of 'destructive fishing',<sup>2</sup> along with chemical/blast fishing and dredge fishing, for which we do not have data.
  - For 19 companies in our database, >50% of the seafood is estimated to be sourced from bottom trawlers or gillnets.
- **Compliance with science:** for this we use the simple average of the 0-10 scores provided by [FishSource](#) measuring the extent to which fisheries' managers follow scientific advice for each fish stock. We estimate company exposure, expressed as a percentage (where 100% indicates the highest compliance).

However, like all scores, these are estimates based on the species and geographical disclosure reported by the company. Only improved disclosure by companies could improve the quality of these estimates.

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<sup>2</sup> See Figure 6 of <https://conbio.onlinelibrary.wiley.com/doi/10.1111/conl.13015>

# Financial performance vs. seafood sustainability

What are the links between financial performance and seafood sustainability? Users of our database can compare sustainability indicators to financial indicators such as revenue, EBIT margin, market cap, enterprise value, net debt/EBITDA and return on equity metrics for each company (when available), courtesy of FactSet.

Interesting links evidenced include:

- A negative 27% correlation between revenue and reporting precision score, suggesting that large companies disclose less compared to smaller ones (although this is a weak correlation score).
- A positive 29% correlation between EBIT margin and 'Proportion of catches that is sustainable', based on Global Fishing Index data (and a negative 16% correlation between EBIT margin and "proportion of catches that is overfished" based on the same source. This suggests a possible link between the health of the biomass and the ability of a company to generate profits from that biomass (although again this is a weak correlation coefficient). We found numerous examples of such links when zooming in on a specific industry/company, for instance the [\*tuna caught by Chinese companies\*](#), or the [\*margins generated by retailer Carrefour\*](#).
- A negative 20% correlation between EBIT margins and 'Access of foreign fishing fleets', suggesting that companies operating in waters open to foreign fleets - such as the [\*Chinese distant-water fishing fleet\*](#) - experience a negative impact on profitability.
- All other correlations between the different financial and sustainability indicators are very close to zero.

## Call for action for investors and corporates

### Investors deserve better than sailing in the dark

For any assessment of seafood-related sustainability risks, knowing the species harvested or handled and their harvesting location is crucial. Unfortunately, this information is all too often unavailable.

Without it though, investors are sailing in the dark. In addition to being unable to estimate financially material risks, they are also unable to gauge key reputational risks, such as IUU fishing, or litigation risk. Lastly, companies that do not have granular data on species exposure and harvesting locations are unlikely to be aligned with the Taskforce on Nature-related Financial Disclosures (TNFD) framework (and in particular, its [\*Locate\*](#) component). Nor are they likely to be able to comply with the EU Corporate Sustainability Due Diligence Directive (CSDDD), the requirements of which will also apply to non-EU companies meeting a certain number of thresholds.

**Financial institutions should therefore demand greater supply chain transparency from seafood-exposed companies. In particular, this means asking corporates to disclose the 'what' (scientific names), 'where' (exact location of farming/capture), and 'how' (fishing gear or farming method) of their entire seafood portfolio.**

### **It is in most companies' benefit to be more transparent about their seafood**

A lack of disclosure means that companies do not have the necessary data, or that they have the data but do not want to share it.

In both cases, this shows them in a bad light, and leaves them vulnerable to multiple costly risks, including supply issues (in the case of the collapse of a fish stock or sudden ban on fishing in a given area), or reputational risk (in case of association with illegal fishing or unsustainable practices)

The absence of data is often blamed on suppliers' inability to provide it, and the associated costs to retrieve it. We disagree and argue that instead, there are financial benefits associated with increased disclosure. For instance, going through information shared with us by Carrefour, we estimated that increased seafood supply chain disclosure (which species, which location, which harvesting method) would generate *net financial benefits equal to 3% of Carrefour's gross profit on seafood in France.*

The reluctance to share information about species and location is often attributed to competition concerns and confidentiality issues. We disagree again: sharing the exact species, country of harvest and harvesting method on a regular basis at the end of each month or quarter is not going to alert competing fishing vessels about the exact location of a fish school on a live basis.

Therefore, for their entire seafood portfolio, seafood-exposed corporates must track internally the **'what'** (scientific names), **'where'** (exact location of farming/capture), **'how'** (fishing gear or farming method), **'when'** (date of harvesting), and **'how much'** (volumes). Our interactive and bespoke *Seafood Accounting Protocol* guides them in this process.

**Corporates then need to disclose at least the 'what', 'where', and 'how'. Such disclosure can be done via the *Ocean Disclosure Project*, or directly via our *database*.**



## ABOUT PLANET TRACKER

Planet Tracker is an award-winning non-profit financial think tank aligning capital markets with planetary boundaries. Created with the vision of a financial system that is fully aligned with a net-zero, resilient, nature positive and just economy well before 2050, Planet Tracker generates break-through analytics that reveal both the role of capital markets in the degradation of our ecosystem and show the opportunities of transitioning to a zero-carbon, nature positive economy.

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