



Certification of reduction fisheries

Background, status, future

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Marine Stewardship Council

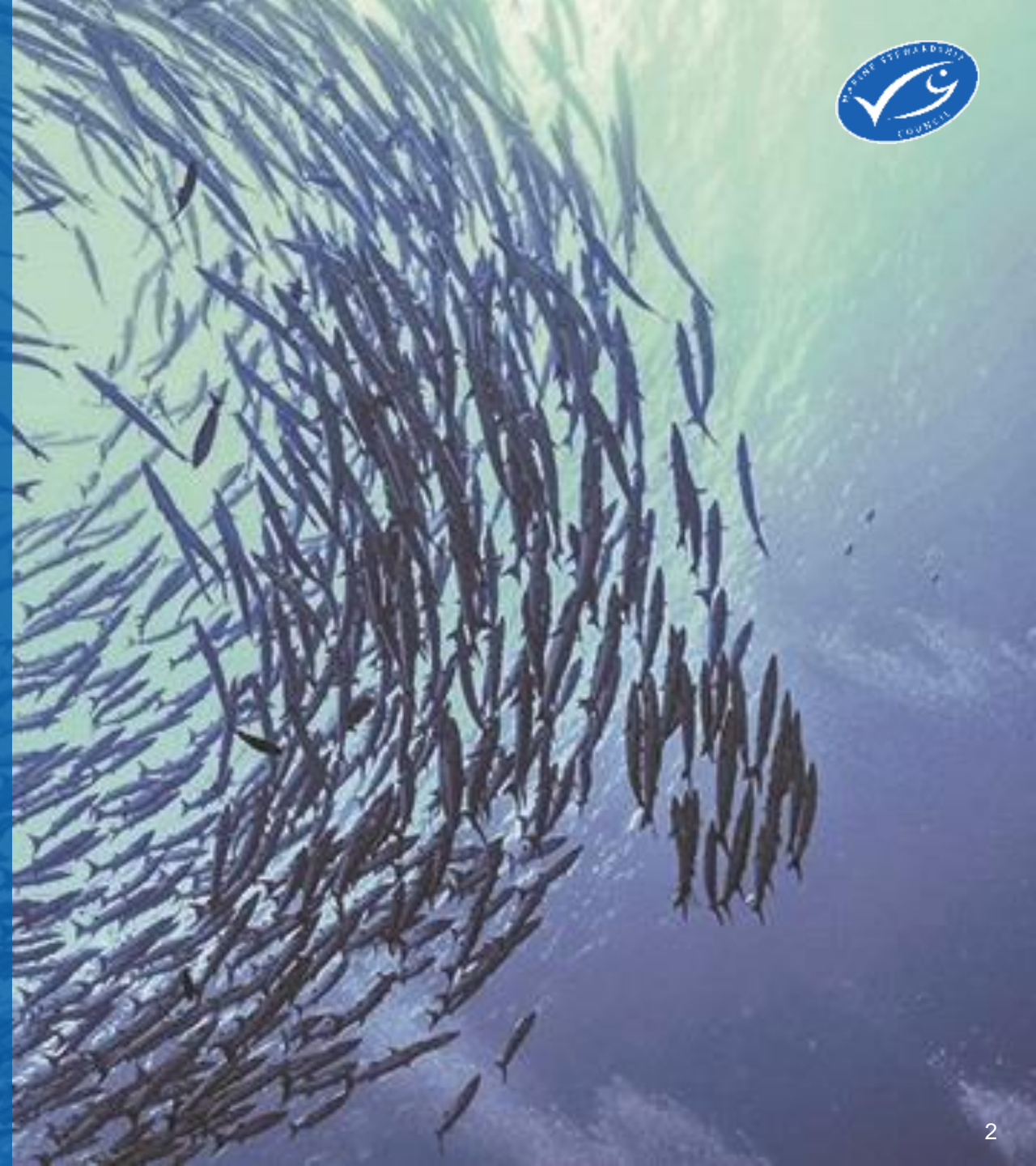


MSC Vision:

World oceans teeming with life and seafood supplies safeguarded for this and future generations

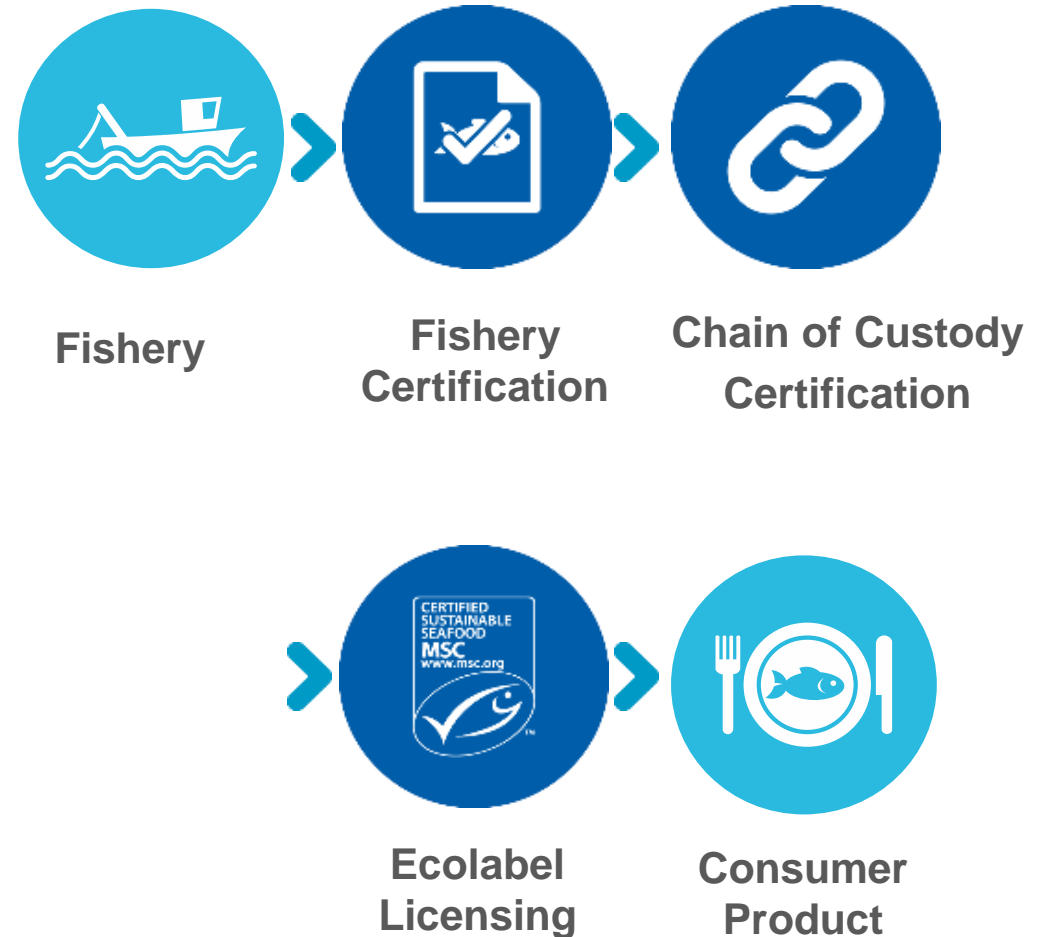
MSC Mission:

Use the ecolabel and certification program to contribute to oceans health by recognising and rewarding sustainable fishing, influencing choices people make when buying seafood and working with partners to transform seafood market to a sustainable basis



Core MSC activities

- Standards setting and maintenance
- Integrity control of the supply-chains
- Ecolabelling program
- Fisheries engagement, capacity building and fisheries improvement program
- Market development, marketing and communications for certified sustainable seafood



High level standards: specific attention for KEY LTL



- All fisheries assessed publicly by 3rd party CABs, against 3 principles: Stock health, Ecosystem impact, Management
- In Principle 1 (stock health) contain specific Low Trophic Level (LTL) requirements:
 - Criteria for identifying whether stocks should be treated as 'key' LTL types (FILTER 1).
 - Higher default abundance levels at which such key LTL stocks should be maintained (FILTER 2).



LTL species for KEY status, Ecosystem role sub-criteria (Filter 1)



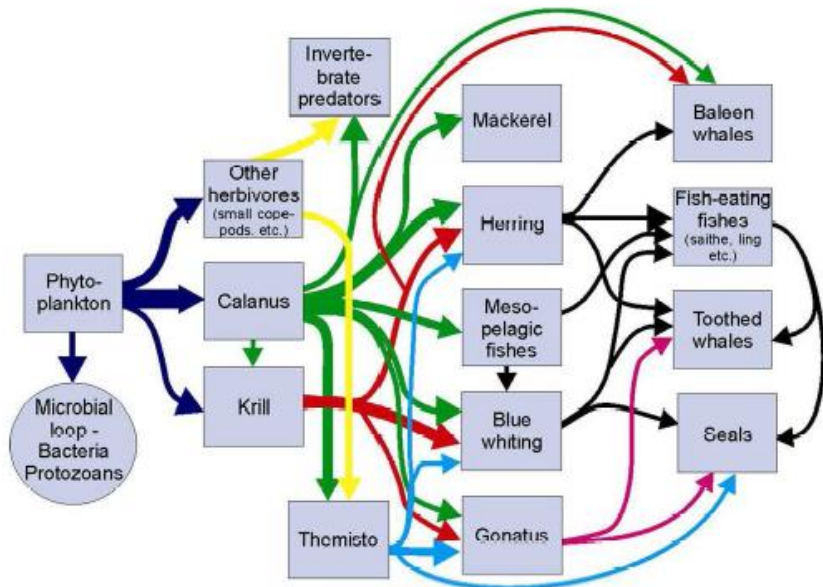
- Family Ammodytidae (sandeels, sandlances)
- Family Clupeidae (herrings, menhaden, pilchards, sardines, sardinellas, sprats)
- Family Engraulidae (anchovies)
- Family Euphausiidae (krill)
- Family Myctophidae (lanternfish)
- Family Osmeridae (smelts, capelin)
- Genus Scomber (mackerels)
- Order Atheriniformes (silversides, sand smelts)
- Species *Trisopterus esmarkii* (Norway pout)



A) A large proportion of the **trophic connections** in the ecosystem involve this stock, leading to **significant predator dependency**

B) A **large volume of energy passing** between lower and higher trophic levels **passes through this stock**; (>5%)

C) There are few other species at this trophic level through which energy can be transmitted from lower to higher trophic levels, such that a high proportion of the total energy passing between lower and higher trophic levels passes through this stock (i.e. the ecosystem is 'wasp-waisted').



Higher Reference Point Requirements (FILTER 2)



- IF KEY, to account for the Ecosystem needs at the SG80 level:
 - ***The default TRP shall be 75%B₀.***
 - A lower TRP level may still score 80 if the CAB can demonstrate (via credible trophic models or robust empirical data) that the level does not:
 - *Impact* the abundance of more than 15% of other species/trophic groups by more than 40% (compared to no fishing) *or*
 - *Reduce* the abundance of any other single species/trophic group by more than 70%.
 - The default LRP shall be half the TRP *but* never less than 20%B₀.



FILTER 1: North Sea herring (Example)



Significant predator dependency, SURF >0.005 = key ltl, IF SURF <0.001 =LTL	Key LTL from SURF	Large V of energy passing through this species, If landings (tonnes) <50000 = Not Key Ltl; Consumer biomass >5 % = Key	Wasp-wasted ecosystem	(Other species of similar TL caught within same LME (as percentage of main species))*	Key LTL
0.00033 ¹	NO	NO	NO	Sandeel 150%, sprat 63%, horse mackerel 23%	NO

Mackinson and Daskalow, 2007 **Based on most recent ICES reports for each stock (5 year avg.)*

A) The diet matrices used here to calculate SURF are derived from Ecopath-Ecosim models describing the North Sea Ecosystem. As the SURF value is <0.001, this indicates NOT KEY LTL status for this criteria.

B) Although landings are above 100 k tonnes, their proportion of total consumer biomass is <5% (0.5 %), so the amount of energy that passes through this species seems to be low.

C) As catches of NS herring are less than the total catches of other species in the system (at a similar trophic level), herring is not the sole component through which energy from primary production can get channelled to higher trophic levels. Therefore, we determine that herring does not form the basis of a wasp-waisted system.

NS herring does not fulfil any of the criteria under Filter 1 and is therefore considered NOT KEY LTL.

FILTER 1: Antarctic Krill (Example)



Significant predator dependency, SURF >0.005 = key ltl, IF SURF <0.001 =LTL	Key LTL from SURF	Large V of energy passing through this species, If landings (tonnes) <50000 = Not Key Ltl; Consumer biomass >5 % = Key	Wasp-wasted ecosystem	(Other species of similar TL caught within same LME (as percentage of main species))	Key LTL
0,006 ¹	YES	YES	YES	None	YES

- A) The diet matrices used here to calculate SURF are also derived from EwE models describing the Antarctic Peninsula, where scoring >0.005 indicates that Krill are KEY in this ecosystem.
- B) Landings are >100 000 t/year, which indicates that energy transfer through this species is likely high.
- C) There are no other species at similar trophic level that fulfil the role of energy transfer that krill performs.

As it fulfils all of the criteria under Filter 1, combined with a wealth of scientific knowledge (e.g. Nicol, 2006, Palomares et al, 2005), krill should be regarded as a KEY LTL stock in the Antarctic ecosystem.

Fisheries in the MSC program 2016



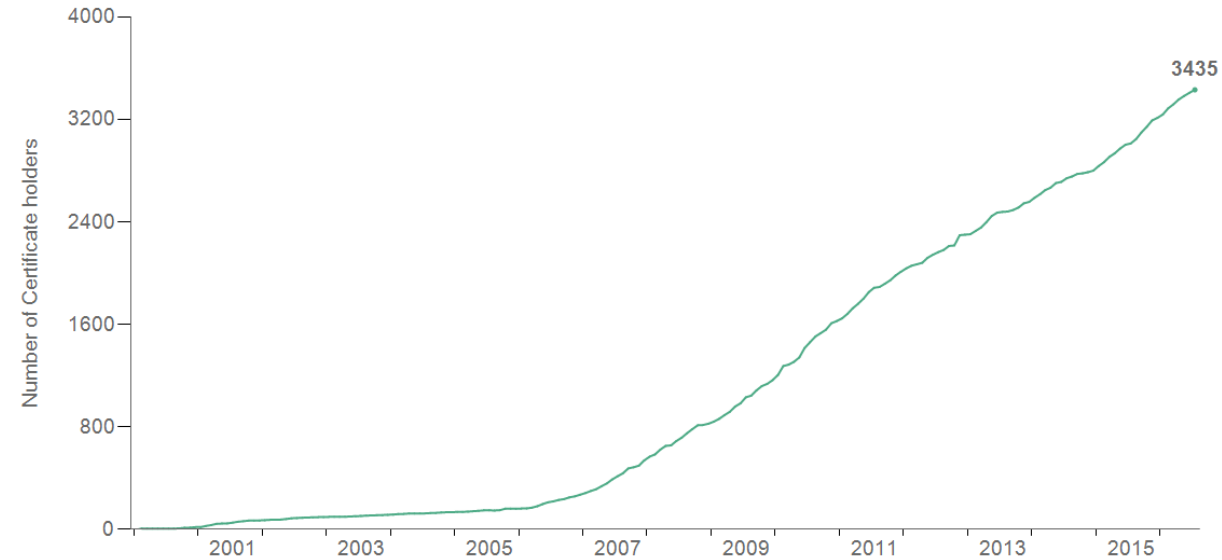
- 11.5% of global landings engaged in MSC programme
- Volume of certified fish increased by 800,000 tons (+15%) yr/yr
- Estimated 1.8 Million MT going to reduction, up 200% since 2014
- Estimated 1,5 Million MT in Pre-Assessment – FIPs going into reduction, expected to start FA in next 18 months
- North European Fisheries like Danish North Sea reduction fisheries, Icelandic Capelin, Nordic north atlantic pelagics among pioneers.



Certified	~ 9,500,000 tons	298 fisheries
In assessment	~ 1,100,000 tons	85 fisheries
Total	~ 10,600,000 tons	383 fisheries

Supply Chain engagement: traceability certification

- 3435 companies are certified for MSC Chain of Custody, +15% yr/yr
- Increasing uptake of MSC CoC, also by **Feed** companies, **Petfood** producers, **Nutraceuticals**, and **Meal-oil** producers
- **Drivers: AQ industry, Petfood industry**, ask for independent credible verification of sustainability.



Underlying drivers

1. There is a real sustainability problem in fisheries
2. Public attention, and eNGO campaigning.
3. Public confidence in fisheries and seafood low as a result.



Brussels, DG Mare

Financial Times

Scientists warn of fish stocks collapse

MSC in the market

- > 1500 license holders
- 22,000 MSC labelled SKUs (products,
- Up 15% yr/yr
- Strong increase in meal-oil products sold as MSC (B2B), and pet foods, and in supplements (B2C).



100% NATURAL FISH BASED DOG TREATS
Tasty Fresh Fish to the highest standards.



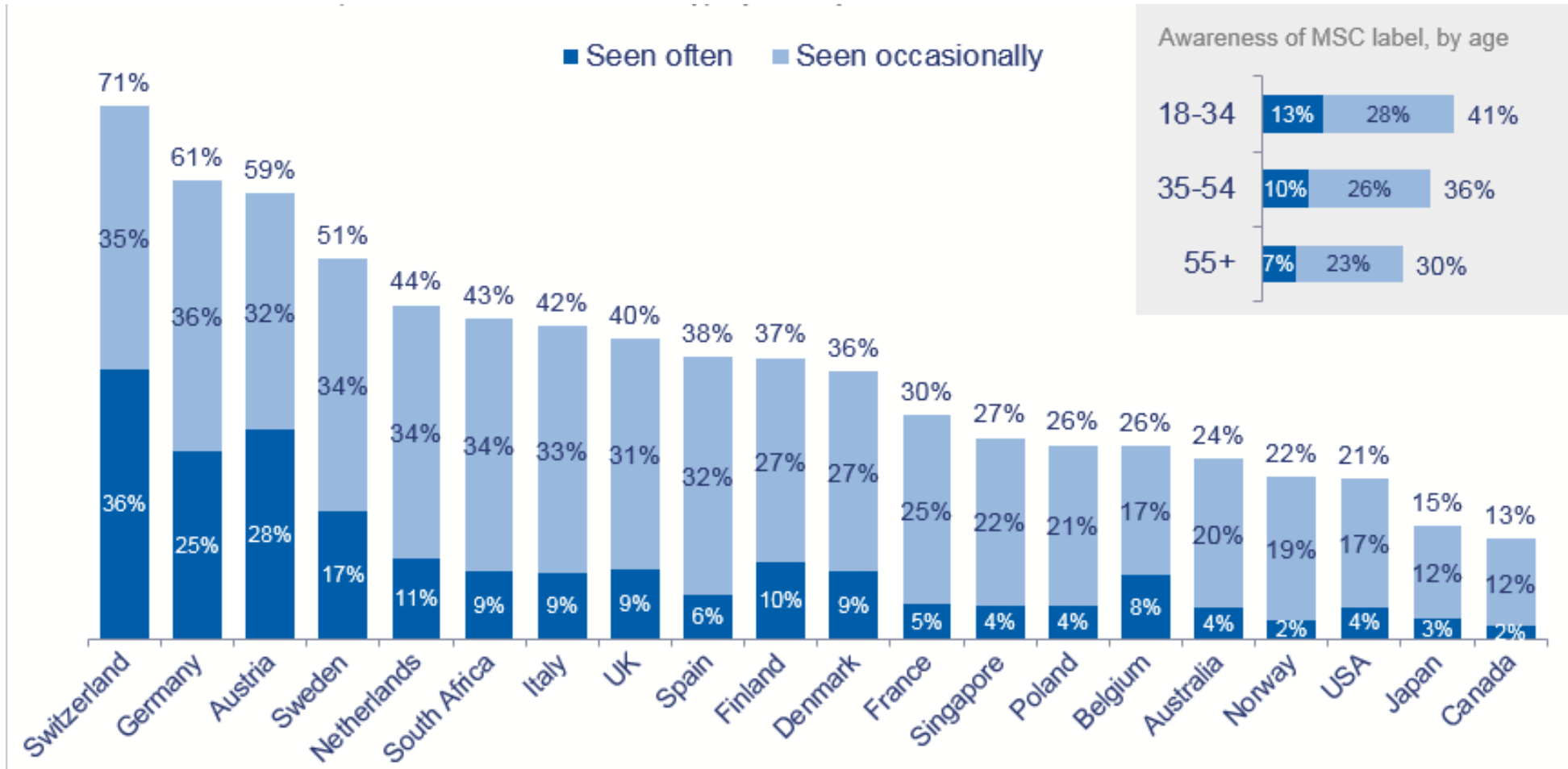
- ✓ 100% NATURAL FISH
- ✓ RICH IN OMEGA 3
- ✓ HYPOALLERGENIC
- ✓ GRAIN FREE
- ✓ NO ADDITIVES OR PRESERVATIVES



Reason for brands-retailers to ask for MSC:



An increasingly aware and critical consumer

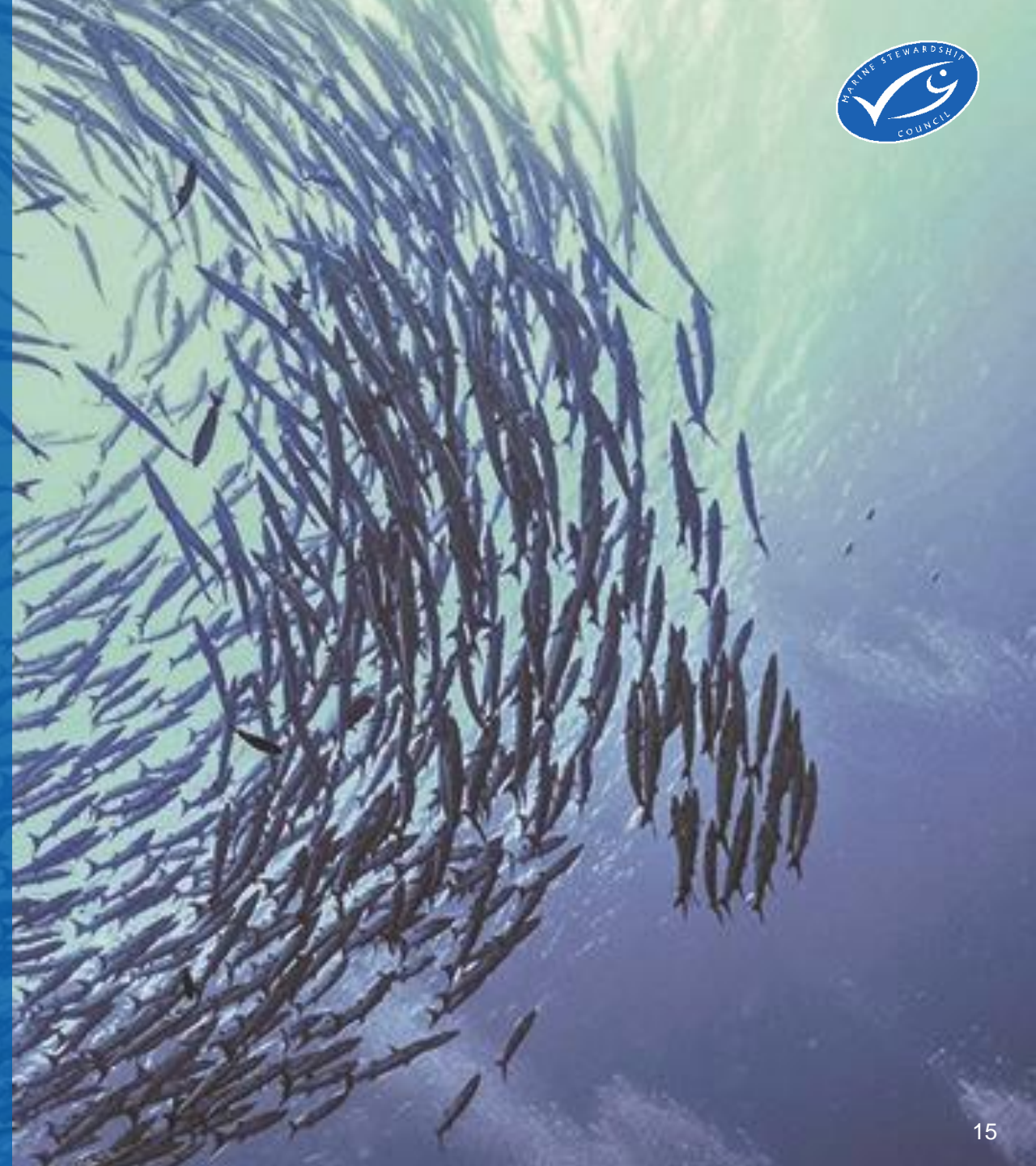


MSC global impacts:

- **> 800 Environmental improvements recorded from MSC Certified fisheries after certification**
- **Stock improvements, bycatch reductions, better CDS, mitigation of ETP impacts.**
- **Majority of improvements assumed prior to certification in PA-Action plan-FIP projects towards MSC.**

Opportunities for reduction industry:

- MSC certification offers recognised and credible verification of fisheries sustainability-traceability.
- North-Atlantic reduction fisheries relatively well placed to obtain MSC certification and leading the engagement in MSC.
- Front runners can enjoy market opportunities, reputational gains, demonstrate measurable improvements where needed.



A large fishing vessel is shown at sea at night, illuminated by its own lights. The vessel is positioned in the center of the frame, with its lights reflecting on the water. The sky is dark, and the water is dark blue with some whitecaps. The text "Thank you" is overlaid on the image in a large, white, sans-serif font.

Thank you

For more information please contact:

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www.msc.org

Higher Reference Point Requirements (FILTER 2)

