

North Atlantic Seafood Forum

Blue Food and Marine Ingredients



22 June 2022

Petter M. Johannessen, Director General

A sustainable platform for healthy food for the future



 **1.** Feed is a multifaceted challenge....



 **2.** ... but circularity and collaboration are a source of opportunities...



 **3.** ... while data enable more and more assessment and informed choices to be made

1. Feed: a multifaceted challenge



1.1

The origins of aquafeed: fishmeal and fish oil

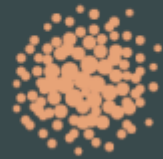
UNUSED RESOURCES HAVE THE POTENTIAL TO FEED THE WORLD



Recycled byproducts



Species with very limited direct food market



Fish oil & fishmeal + additional ingredients



Animal feed



Healthy farmed species



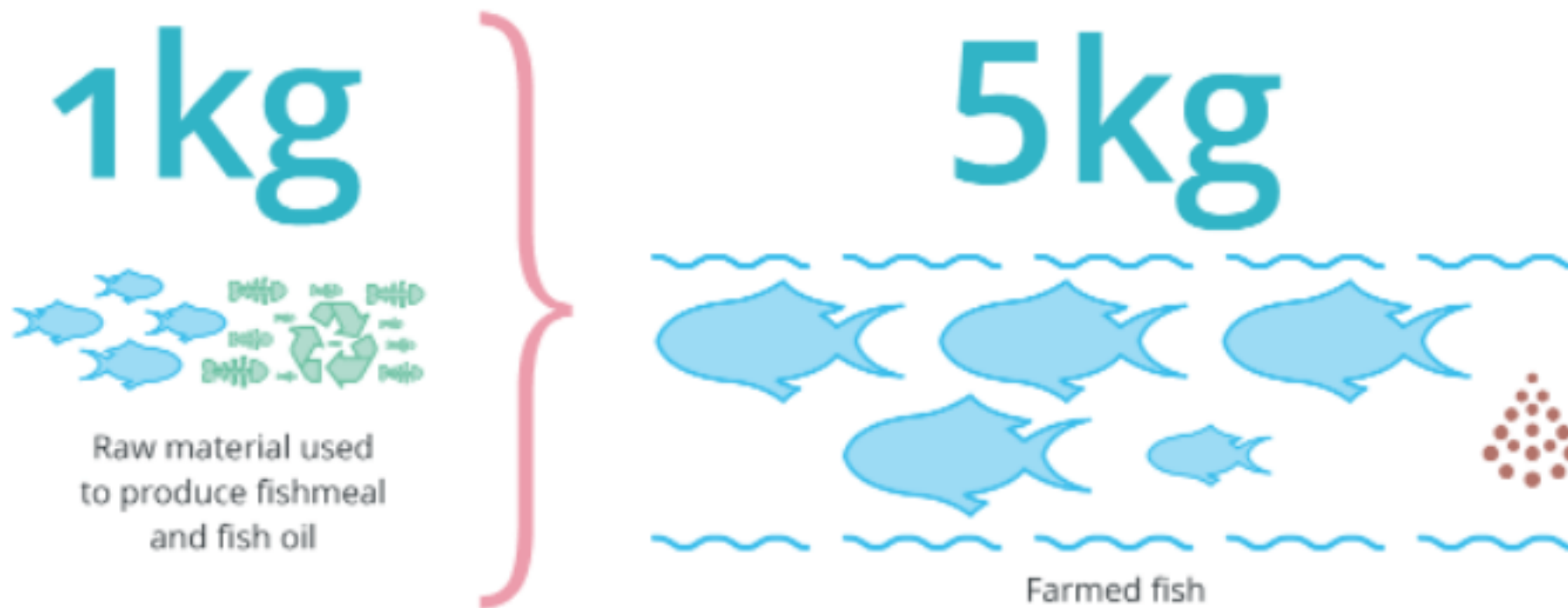
Healthy population

TARGETED SPECIES: SMALL & BONY FISH AND PROCESSING BYPRODUCTS

1.2

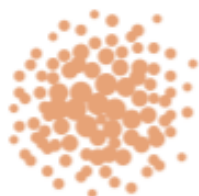
Fishmeal and fish oil have been supporting the production of farmed fish

MARINE INGREDIENTS HAVE A MULTIPLIER EFFECT



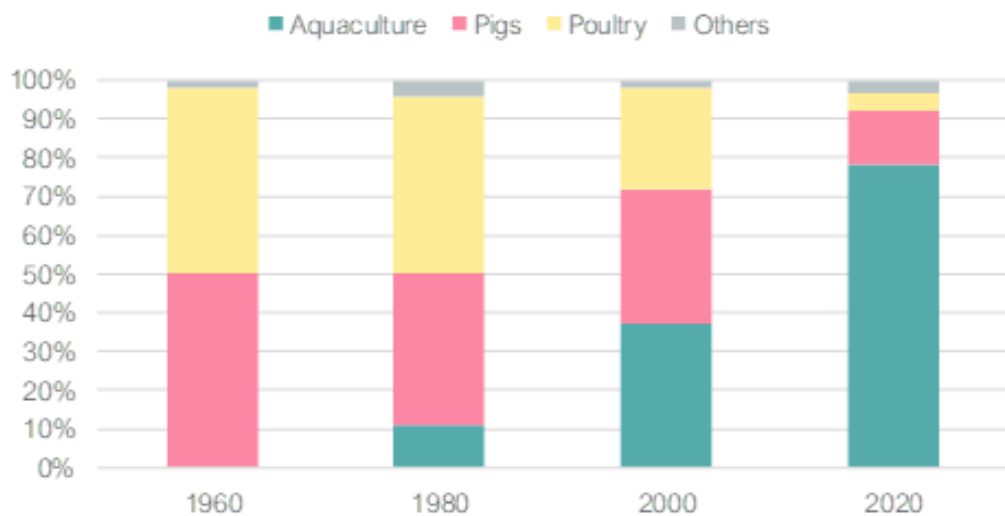
1.3

Aquaculture has overtaken the pig and poultry sectors in terms of fishmeal / oil use



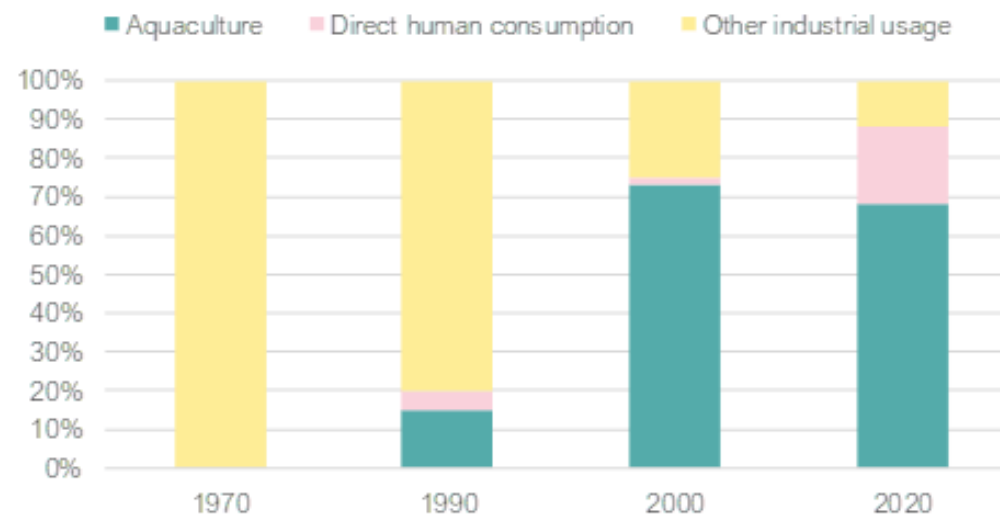
Fishmeal

from pigs and chicken feed to aquafeed

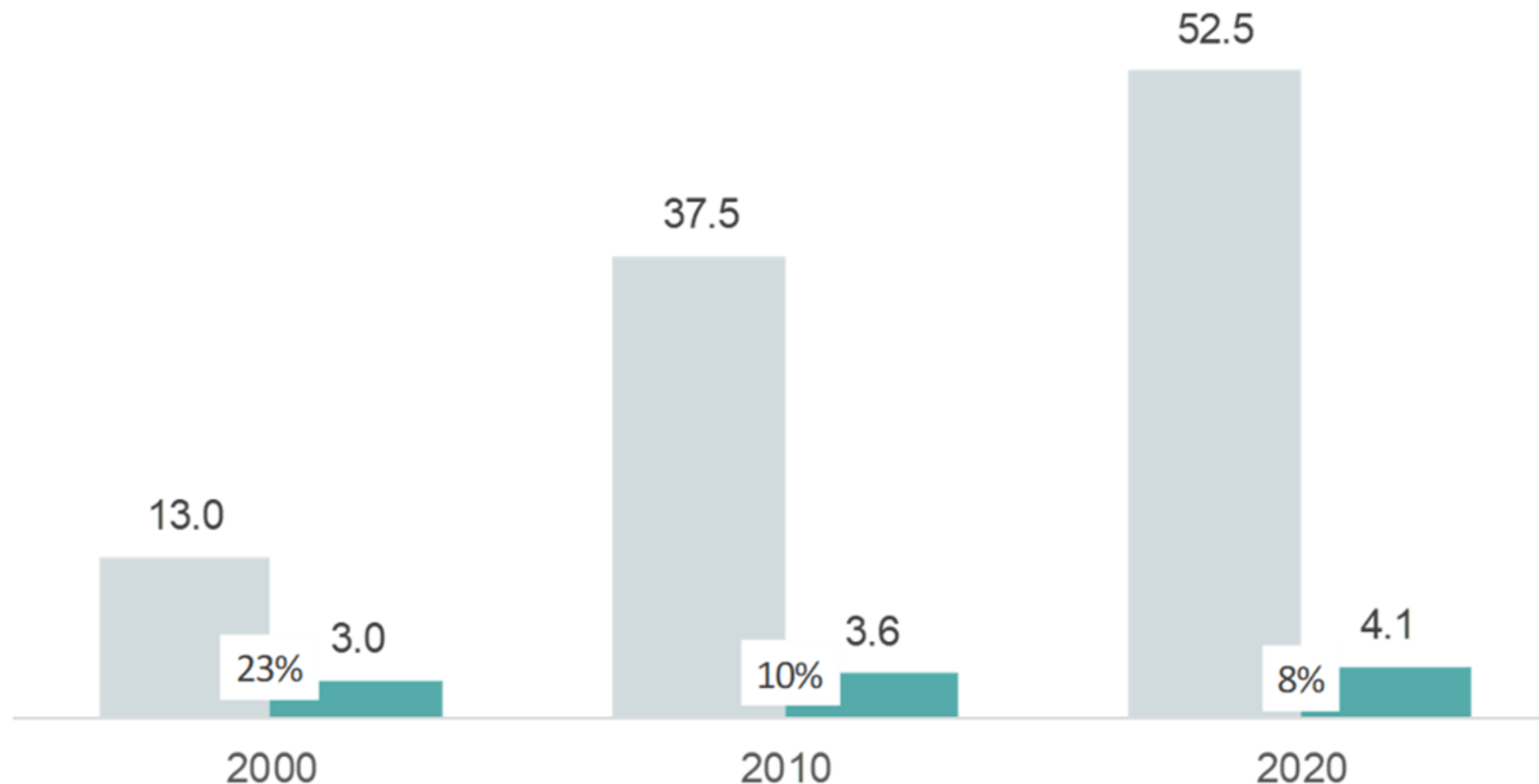


Fish oil

from discard to aquafeed and human health



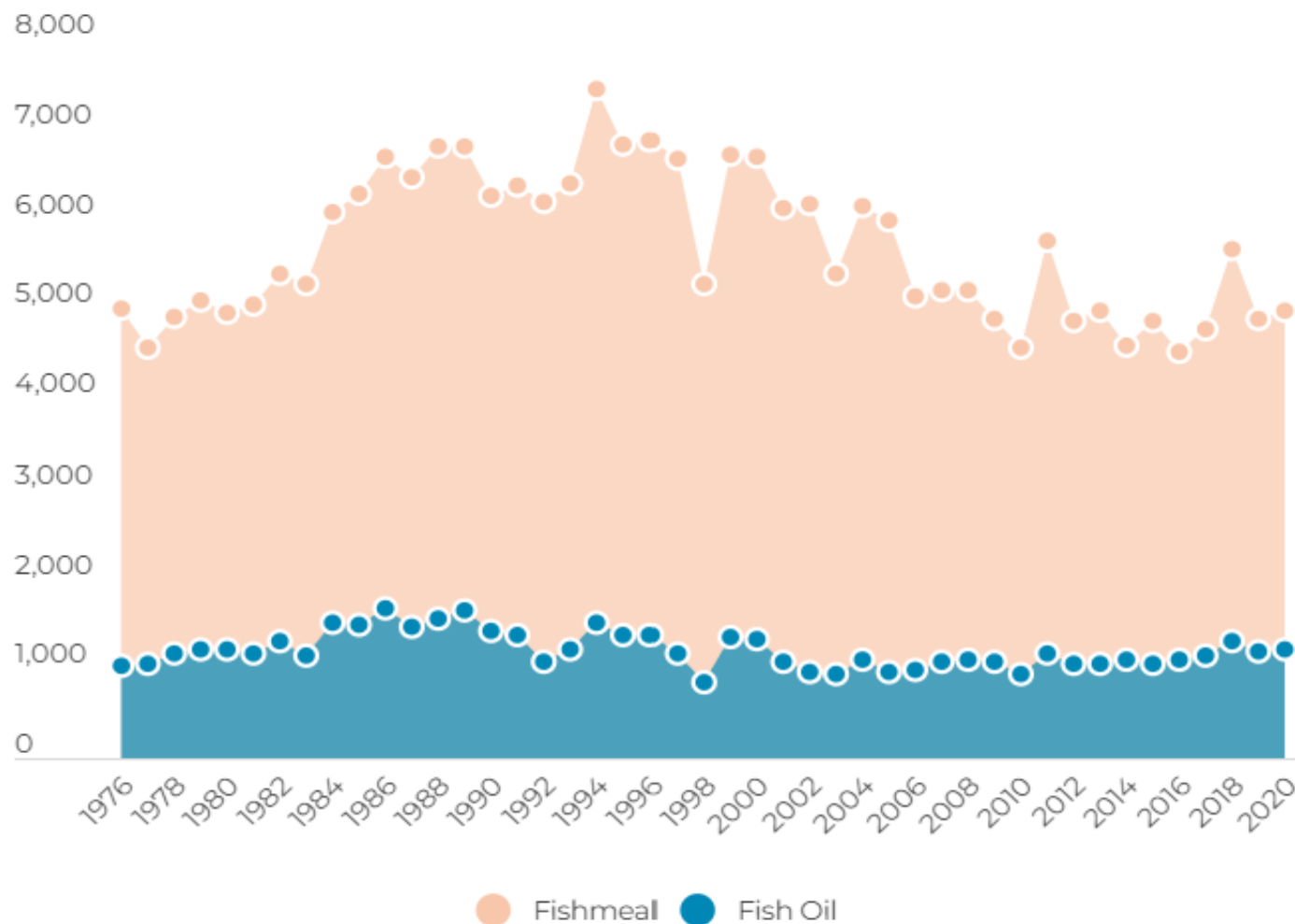
1.4 | An ever-increasing need for feed...



GLOBAL AQUAFEED PRODUCTION AND FISHMEAL USE BY AQUACULTURE 2000 - 2020 Source: IFFO 2022

1.5

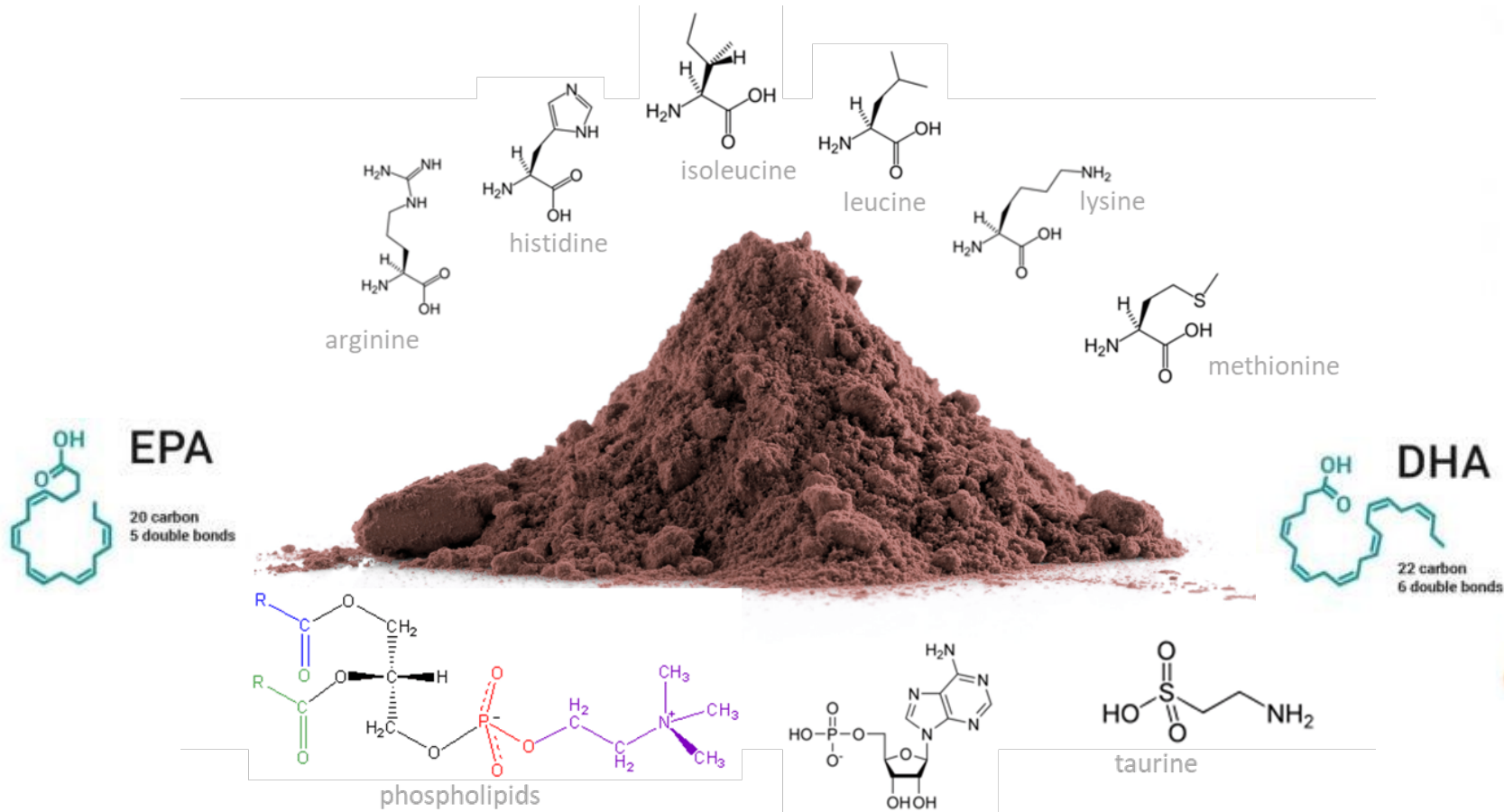
... while fishmeal and fish oil volumes have remained stable for the last decade



Source: IFFO

1.6

... which is why marine ingredients are used as strategic ingredients



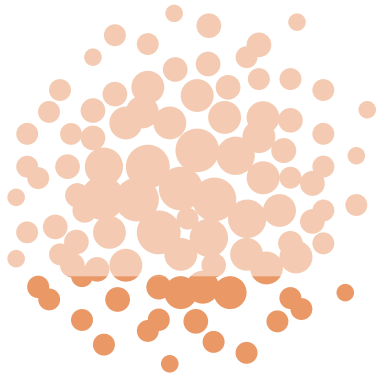
“Fishmeal and fish oil are still considered the most nutritious and most digestible ingredients for farmed fish, as well as the major source of omega-3 fatty acids”. SOFIA Report (2020)

2. Circularity and collaboration are sources of opportunities



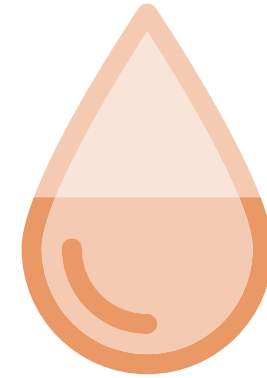
2.1

By-products make up one third of fishmeal and fish oil



30%

of the world's fishmeal production already comes from byproducts



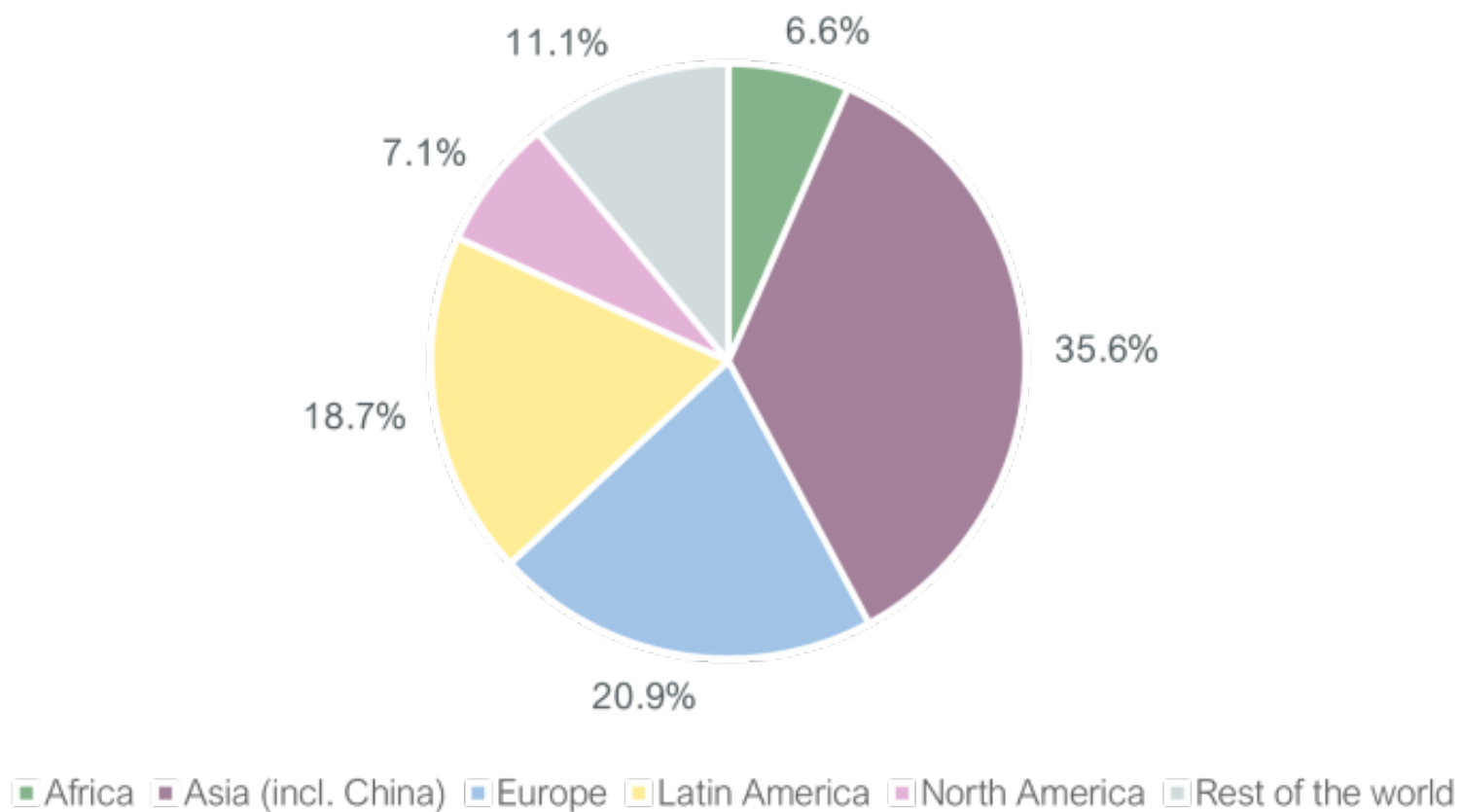
51%

of the total fish oil production already comes from byproducts

2.2

There is potential to go even higher...

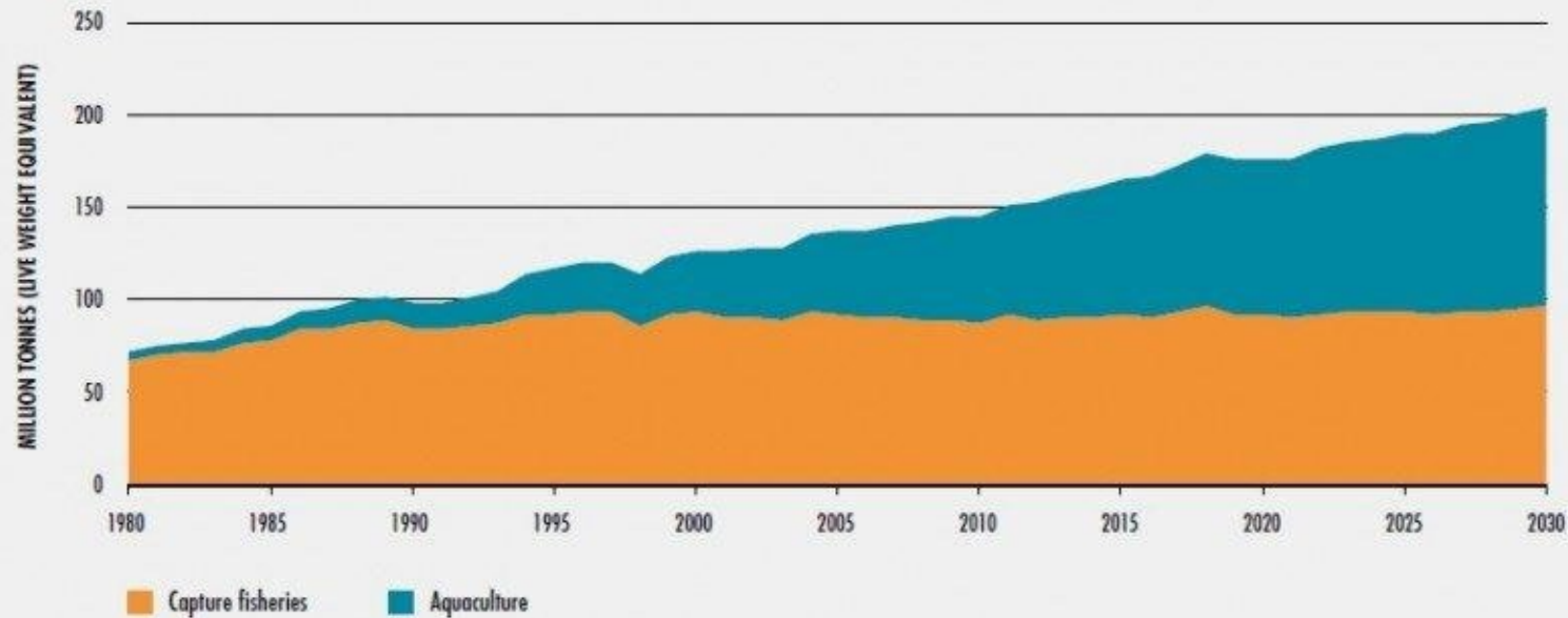
By-products marine ingredients: regional breakdown



2.3

... by better capturing the waste-streams from the expanding aquaculture sector

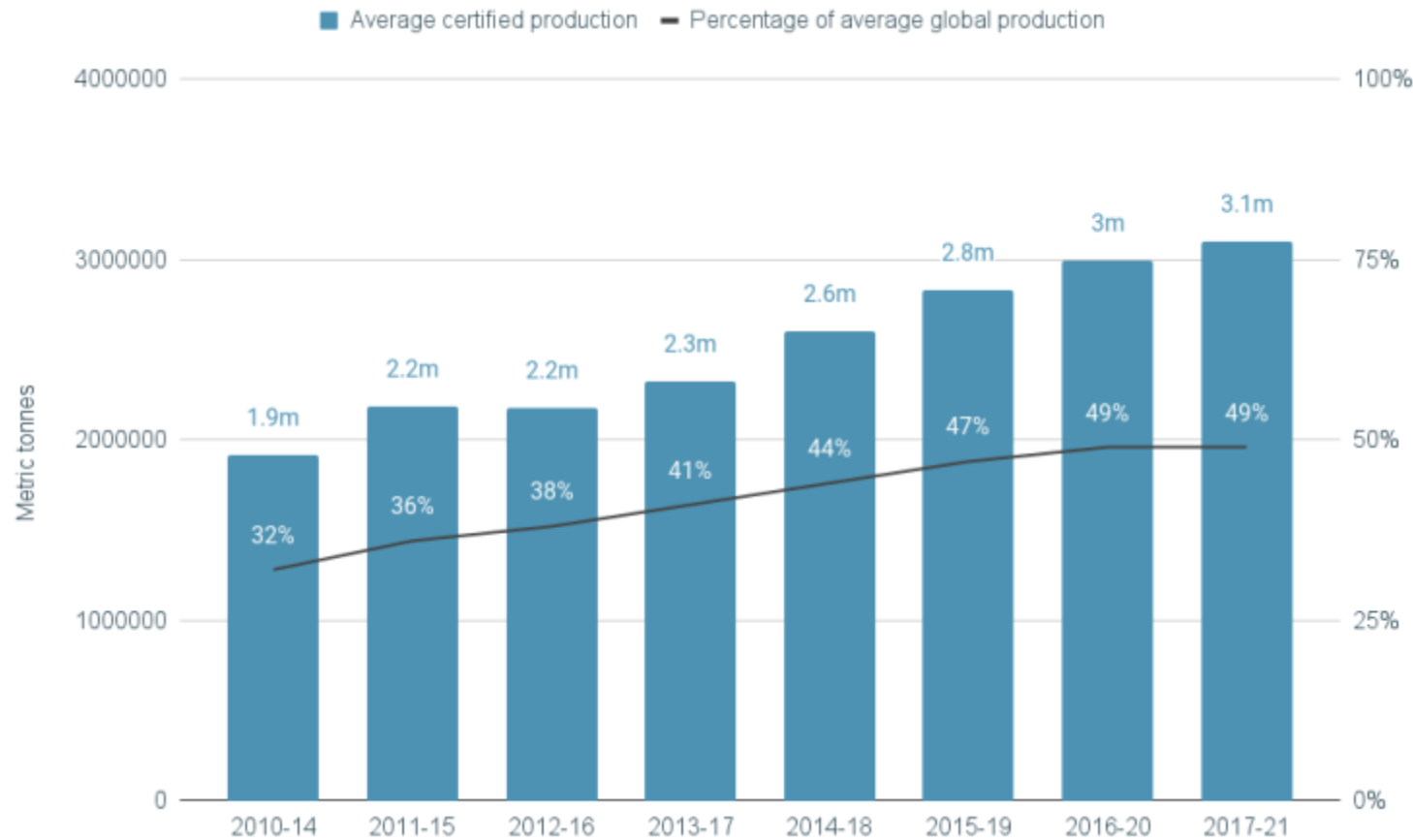
FIGURE 51
WORLD CAPTURE FISHERIES AND **AQUACULTURE PRODUCTION**, 1980–2030



SOURCE: FAO.

2.4

... by increasing the volumes of certified marine ingredients



Global share of certified marine ingredients (MarinTrust standard) – 2022 figures – Source: MarinTrust



Global
Roundtable
on marine
ingredients

IMPROVE AND INCREASE THE
AVAILABILITY OF SUSTAINABLE
MARINE INGREDIENTS

GLOBAL DIALOGUE AND
ACTION ON FISHERIES
IMPROVEMENTS

2.6

Complementarity among all sustainable feed ingredients is the key for blue food to expand



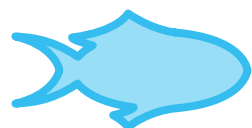
Oceans make up

70%

of our planet



but fish accounts for...



17%

of total animal protein



7%

of all proteins



3.

Data enable more and more assessment and informed choices to be made



3.1

Gathering data at all stages

Environmental impacts do not just occur on the production unit

- Feed ingredients
- Feed processing
- On farm production
- Processing
- Distribution
- Consumption
- Waste disposal

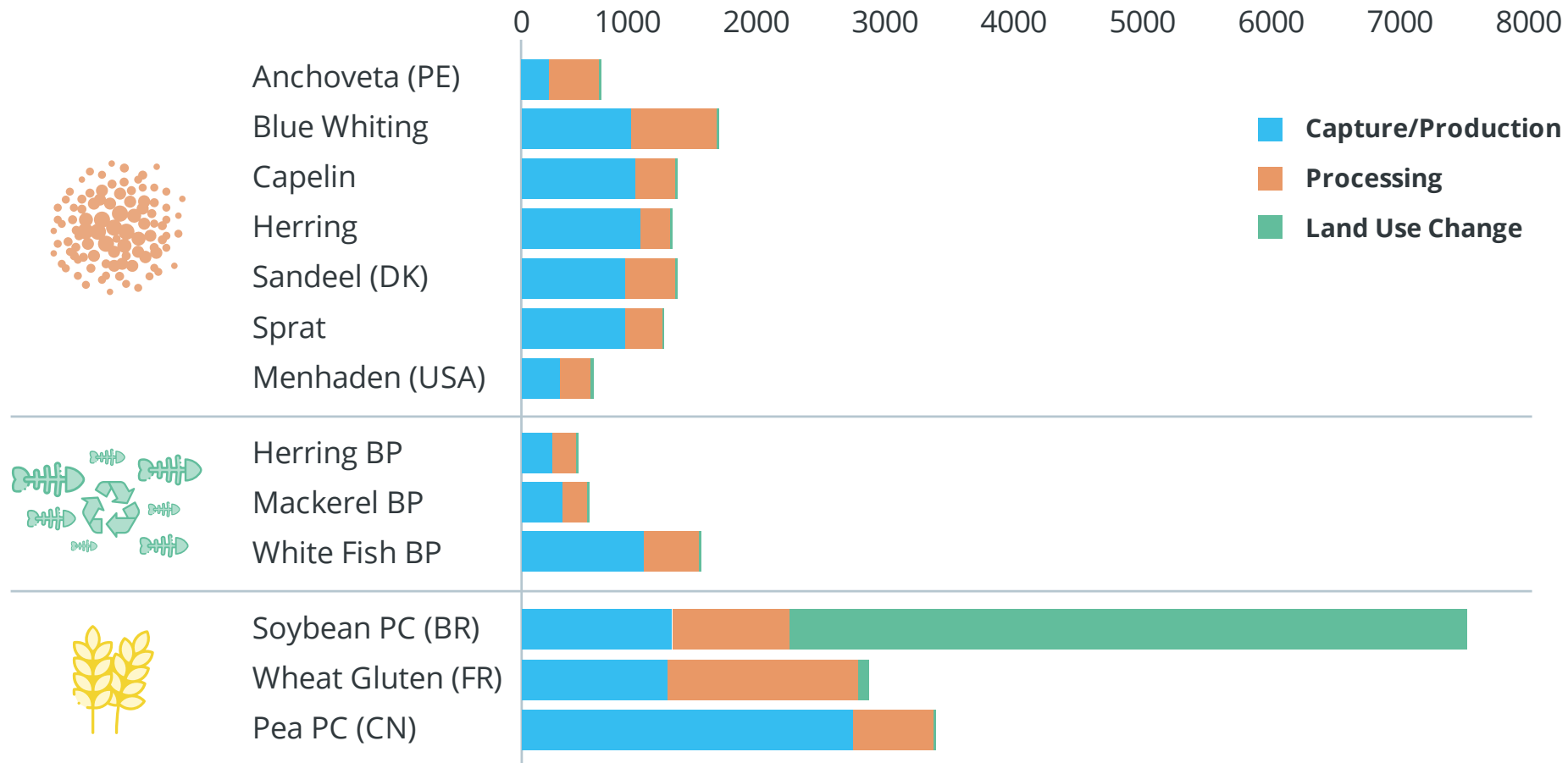
All require land, water, raw materials and energy, and can lead to harmful emissions



3.2

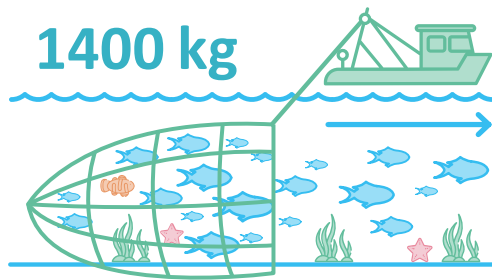
Comparing data across different sectors

CARBON FOOTPRINT (KG CO2 EQ. PER TONNE OF PRODUCT)

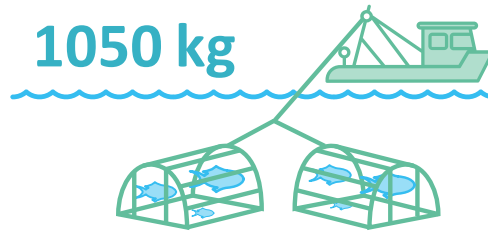


Being proactive on environmental impacts

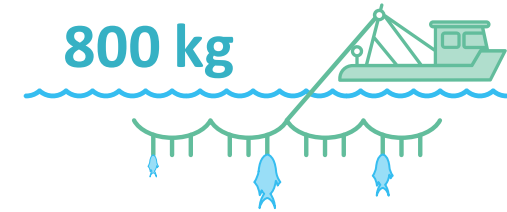
FUEL USE (PER TONNE FISH)



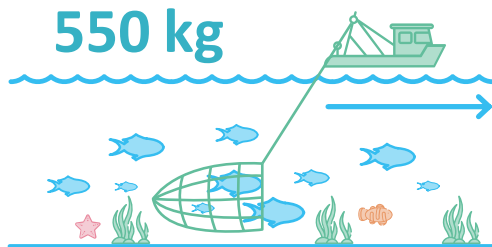
Trawling



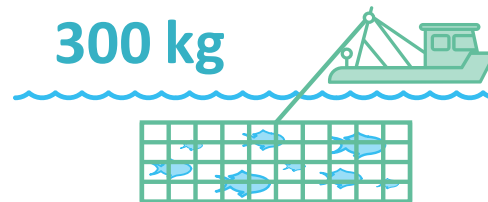
Creel



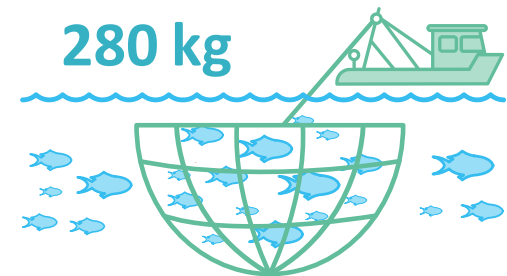
Long-lining



Artisanal Trawl



Gill-Netting



Purse Seining

3.3

Engaging with the feed sector and encouraging more sharing



HOME ABOUT GFLI GFLI MEMBERS GFLI PROJECTS



IFFO – The Marine Ingredients Organisation joins GFLI as member



www.iffo.com

