



Feed and carbon footprint in aquaculture – an industry perspective

Umberto Luzzana
Skretting





Who are we?

nutreco

 **crouw nutrition**
a Nutreco company

SKRETTING
a Nutreco company 

SKRETTING
a Nutreco company 

OUR PURPOSE

*Feeding
the Future*

30

PRODUCTION
PLANTS IN 16
COUNTRIES



3 M

TONNES
OF FEED



3,500

EMPLOYEES



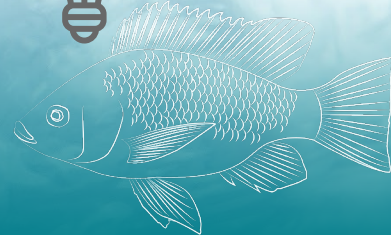
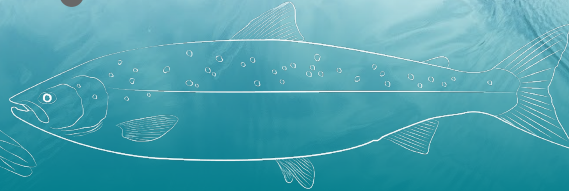
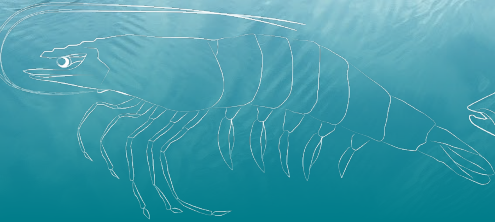
11

RESEARCH &
VALIDATION IN 9
COUNTRIES



€20M

ANNUAL
INVESTMENT IN
INNOVATION



The food systems have a “triple challenge”



**Population
growth**

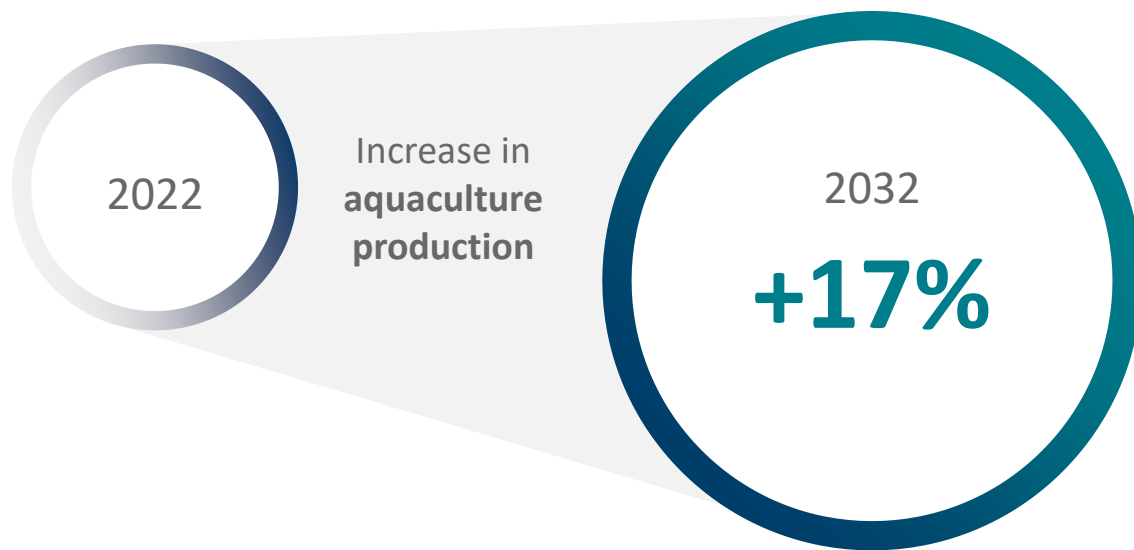


**Climate
Change**



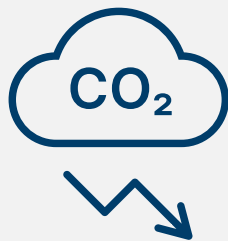
**Social
impact**

Aquaculture is a solution to address the triple challenge



Source: FAO SOFIA Report 2024

We need more ingredients to support the industry's growth



**Feed plays a key role to
reduce aquaculture's
greenhouse gas
emissions**

Science Based Targets adoption helps us to take meaningful actions to reduce our emissions

Our emissions reduction commitment by 2030 (SBT):



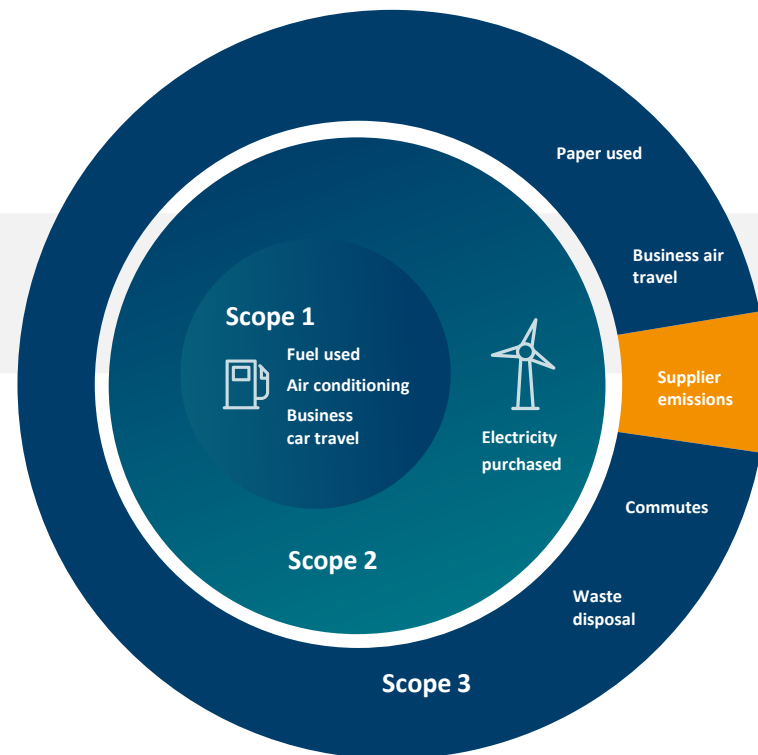
Scope 1 & 2

30%

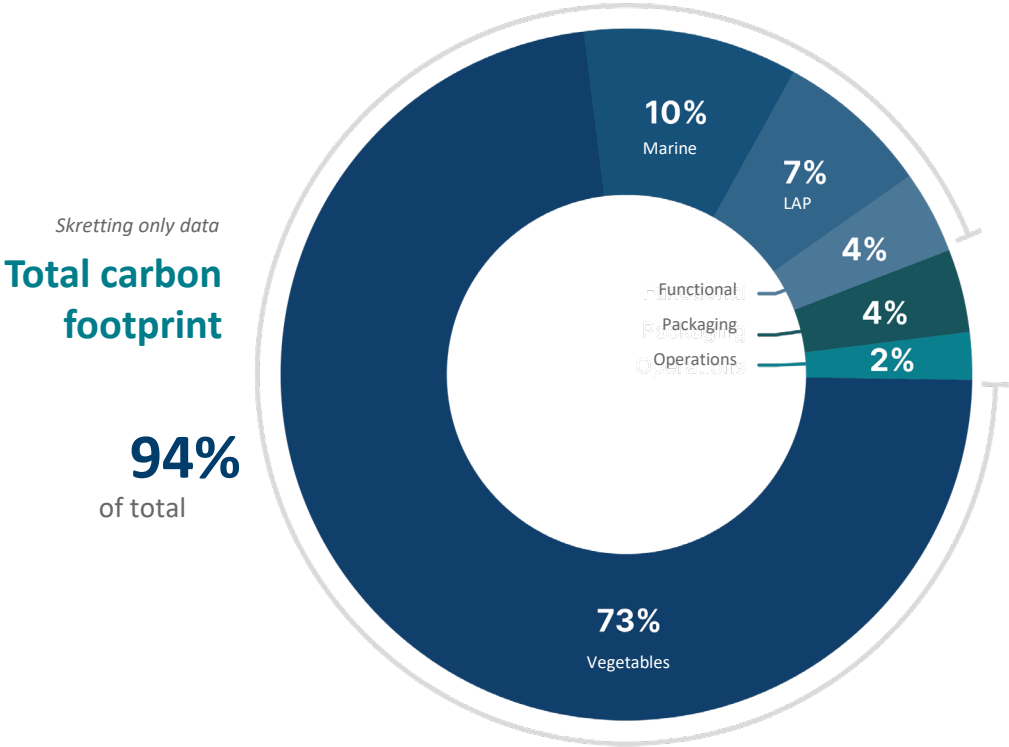


Scope 3

39%



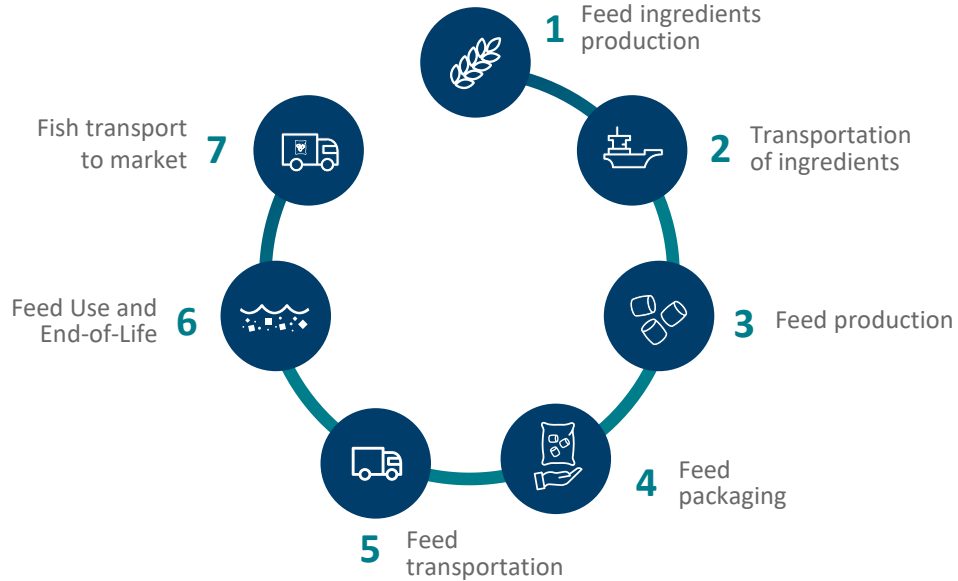
94% of our carbon footprint comes from the ingredients (Scope 3)



-  Supplier engagement
-  Change to lower carbon ingredients
-  Minimise land use change



We need to focus on the life cycle
of the products and not on a single stage

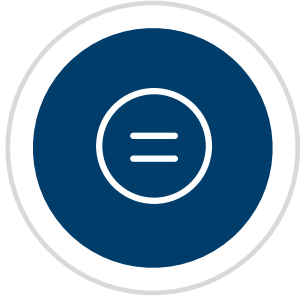


Life cycle mindset



Multi-impact approach

Reducing our carbon footprint: Main challenges



1

We need to
**compare apples to
apples**



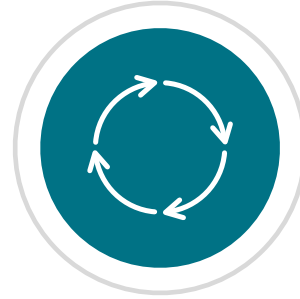
2

We need to know
**where our
ingredients are
produced/
cultivated**



3

We need more
primary data



4

We need to consider
**other environmental
impacts and
the full life
cycle/value chain**

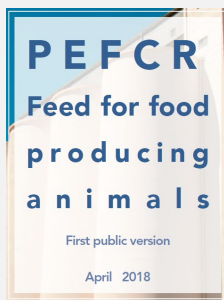


5

We need to deal with
**highly volatile prices of
raw materials**



We need to
compare apples to
apples



Full bill of materials



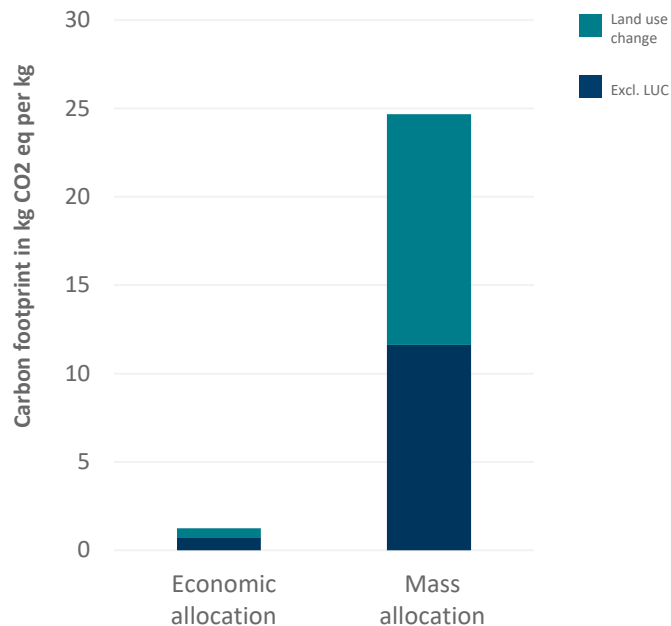
Economic allocation



Land use change
that result in emissions or
removals are
to be included



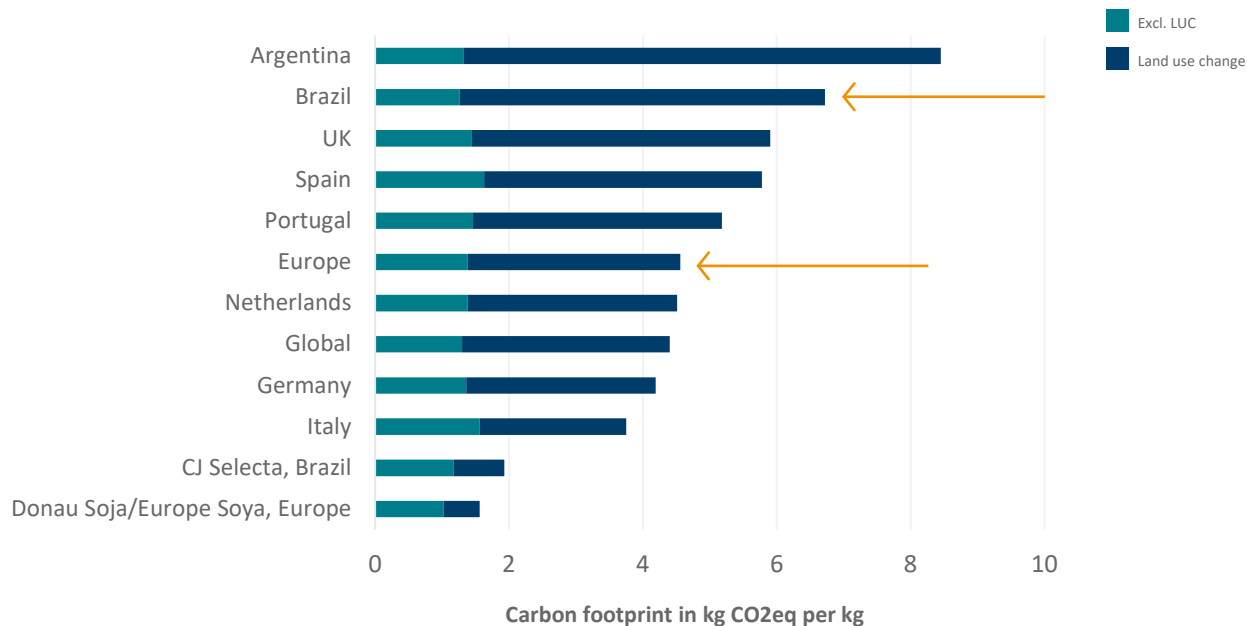
Poultry meal from Europe (GFLI)





We need to know
where
the ingredients are
produced/
cultivated

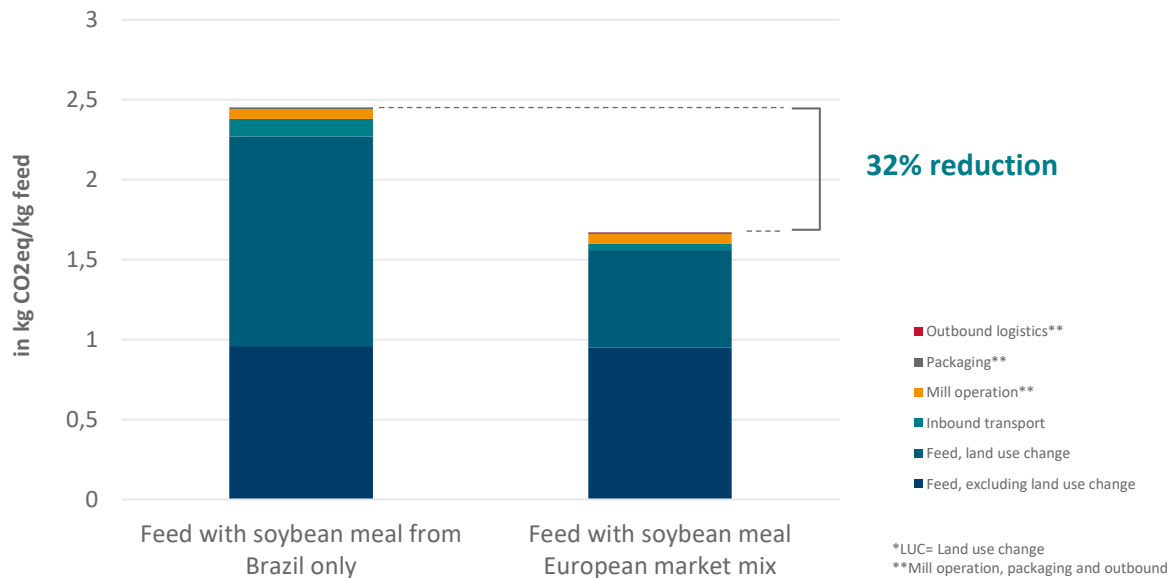
Soy protein concentrate





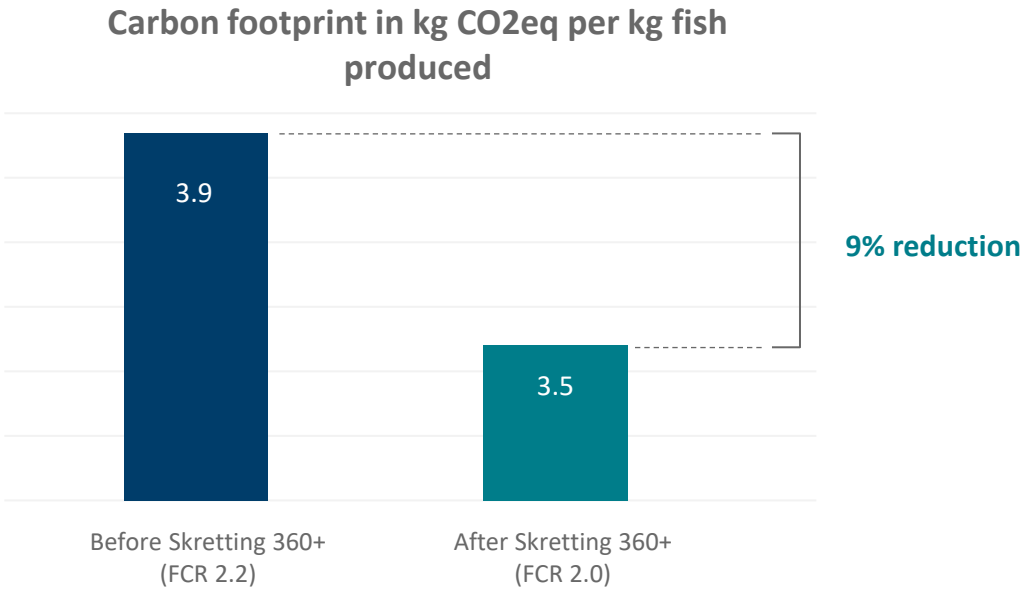
We need more
primary data

Carbon footprint breakdown from cradle to farm

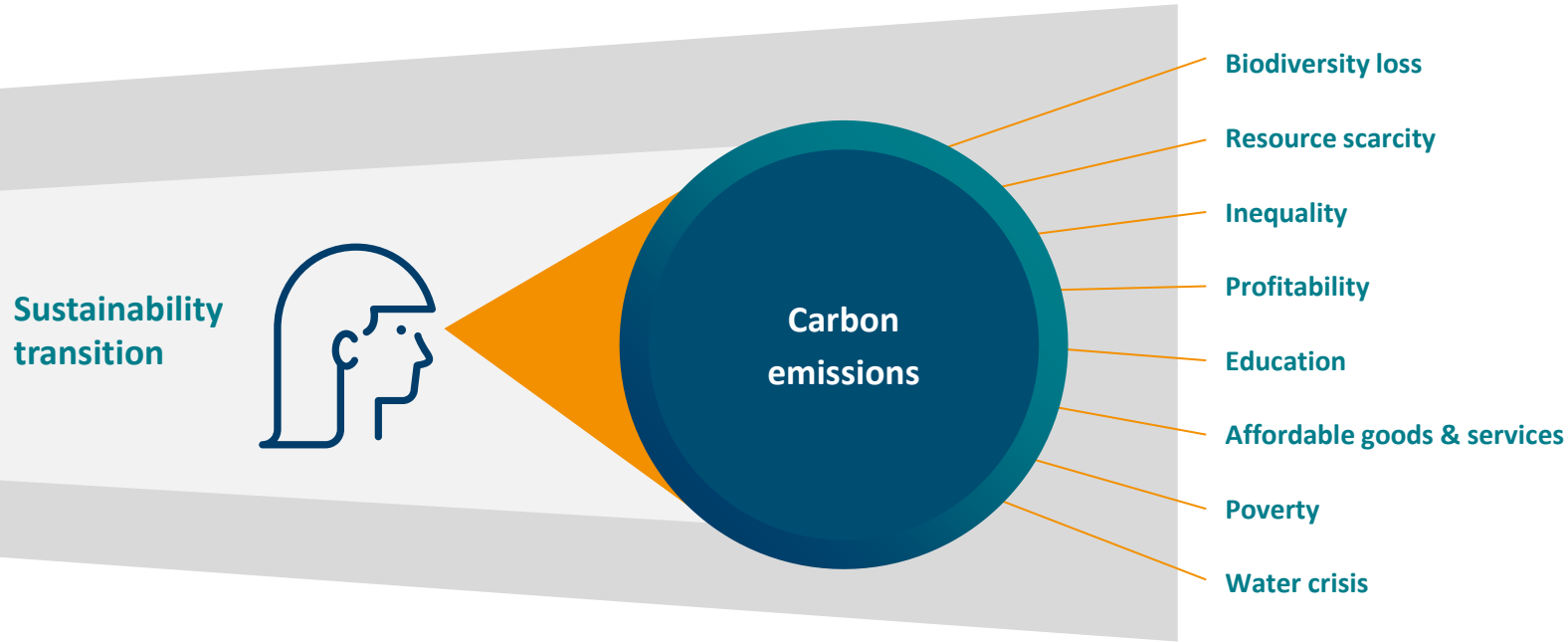




We need to consider
the
full life cycle



Sustainability is much more than carbon footprint



(Adapted from graphic by Jan Konietzko)



Impact Report 2023

Some highlights from 2023



Details of where we use antibiotics and when.



During 2023, at least 17% of our scope 3 emissions were covered by commitments made through the Science Based Targets Initiative.



92% of our soy was purchased as Class A or B.



77% of our marine ingredients were certified or coming from an Fishery Improvement Project (FIP).



For the first time ever, we published the total number of Speak Up cases reported – 10 cases.



Skretting's absolute carbon footprint rose by 4.1% in scope 1 and 2 from 2018-2023 but decreased by 11.1% in scope 3 during the same period. We explain why.



We continue to show our dedication to health, safety and the environment. For the second consecutive year, we achieved a significant reduction in the Total Recordable Case Frequency (TRCF), which decreased by 16% to 1.61 per 200,000 hours worked by the end of 2023.



Skretting's carbon footprint per ton of feed produced decreased by 32% globally from 2018-2023.



Skretting Chile became the first certified salmon feed plant in the world, according to the Aquaculture Stewardship Council (ASC) Feed Standard.



And, finally, I encourage you to read our "Collaboration with stakeholders" section, where we hear directly from them on a variety of important subjects.

OUR PURPOSE

Feeding the Future

In 2023,
Skretting produced
feed to support

**+22
million**

seafood meals
every day globally

