



Ava Ocean

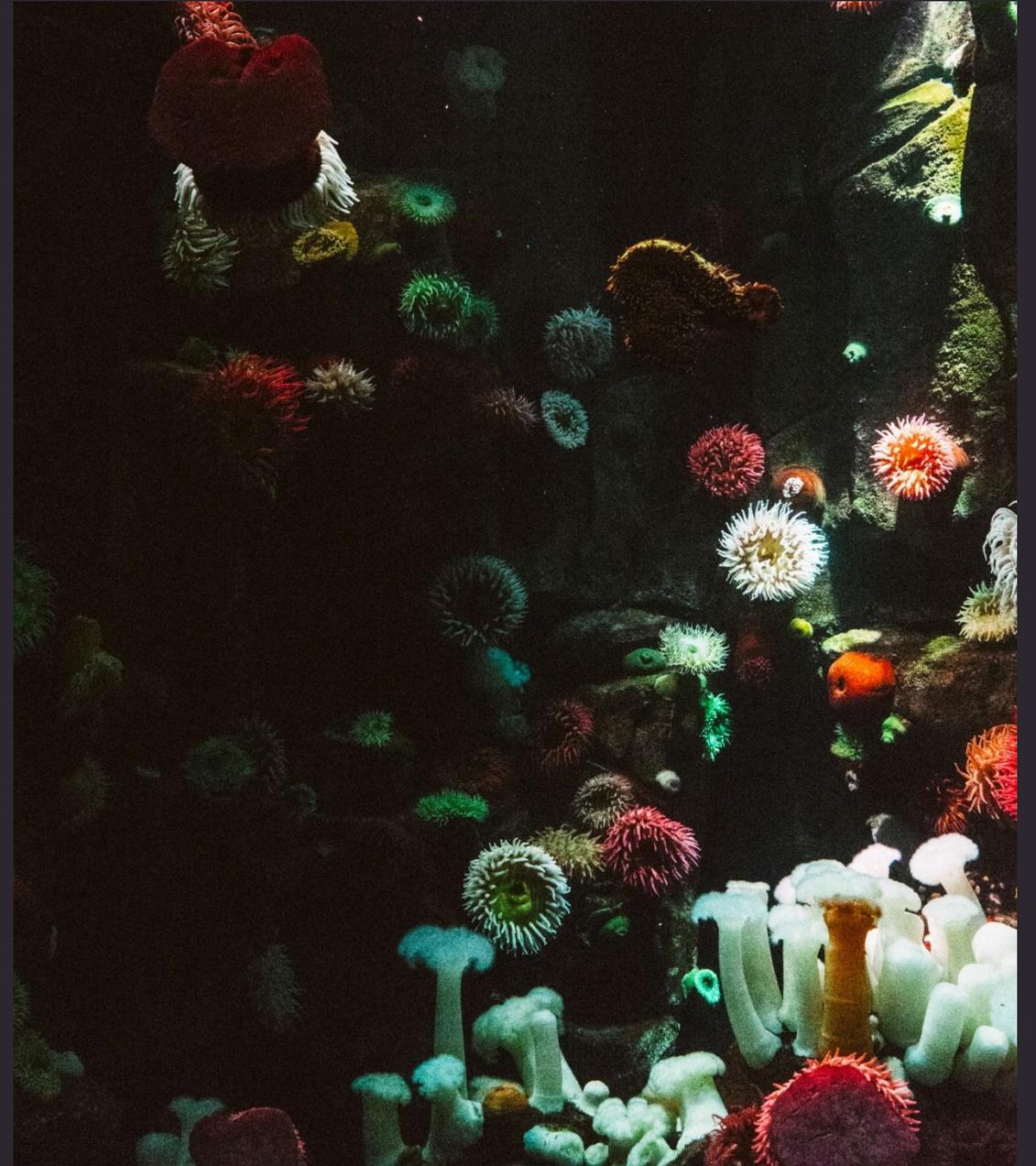
Dagny-Elise Anastassiou

Sustainability manager

WHY

We humans are not unnatural, we are an element to nature's systems

3 billion people rely on seafood as their primary source of protein.



WHY

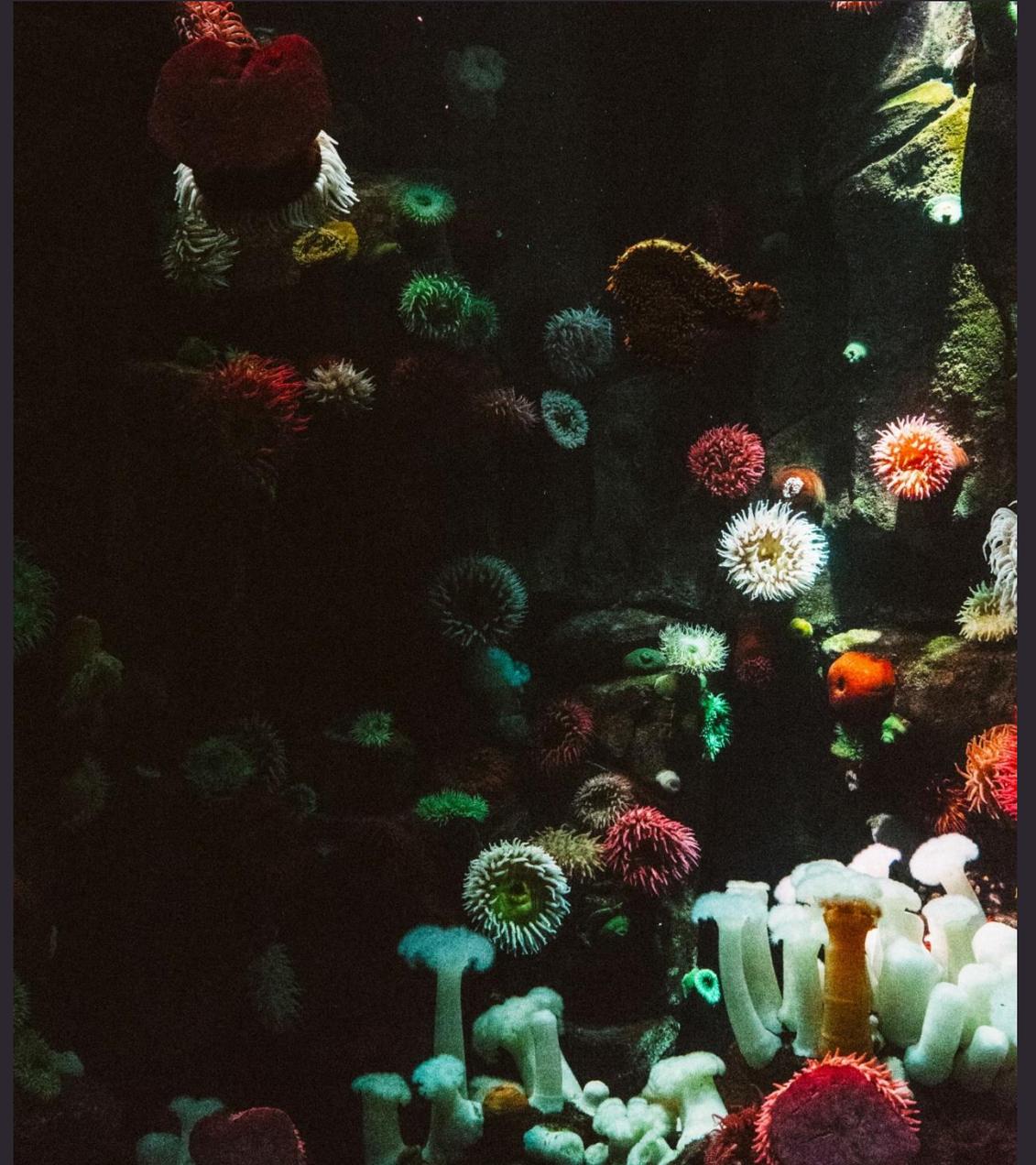
Our oceans and seas are earth's life support system

40% anthropogenic sourced CO_2 is absorbed by the ocean.

That means 90% of the excess heat trapped by the GHGs is captured by the ocean.

The ocean has a carrying capacity of up to 50x more than the atmosphere.

Aquatic food consumption in the last 60 years almost double the global population growth rate.



WHAT

Rethinking how we fish and interact with nature



WHAT

Rethinking how we fish and interact with nature



- Gentle harvesting
- Selectivity process for undersized
- Integrated AI technology
- Multiple sensors for additional data collection
- Scallable technology
- Lower fuel cost

HOW

Using technology to redefine a sustainable fisheries

- Technology has enabled us to reopen a fishery which was closed for 30 years
- Gaining access to a new non-predatory species
- Developing novel economic opportunities with possible cascading effects into other novel markets

Sustainable fishing should allow for the regeneration of habitats and fish stocks, including species not directly targeted by fishing (non-target). It should extract fewer fish than are replenished naturally and does so in a non-destructive way.

HOW

Using technology to redefine a sustainable fisheries

WHAT

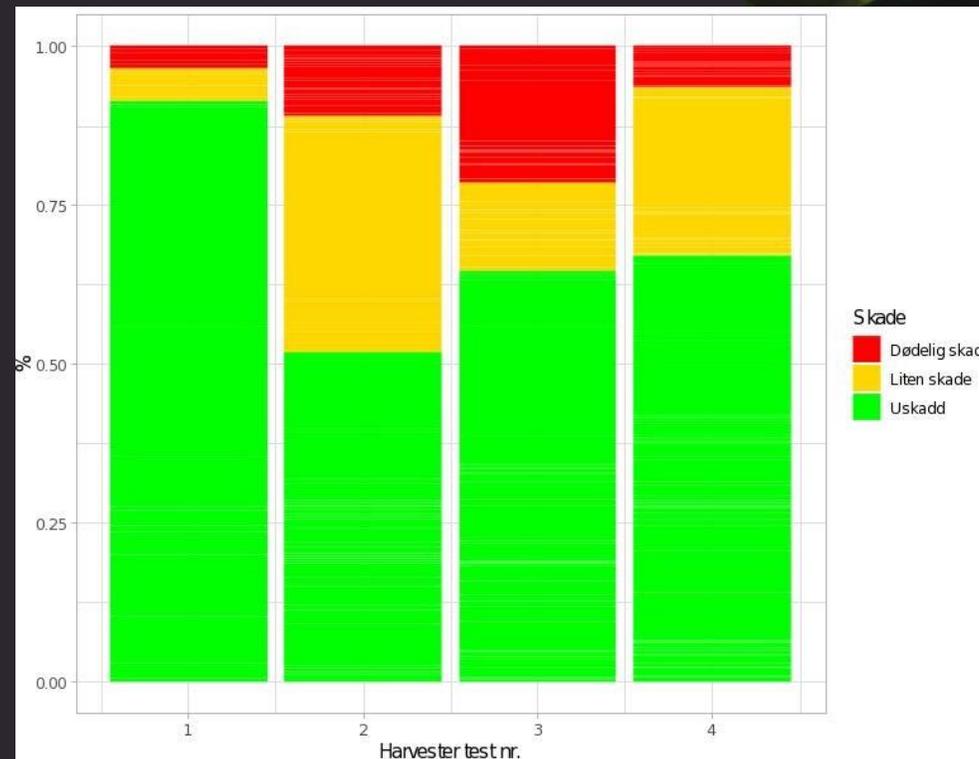
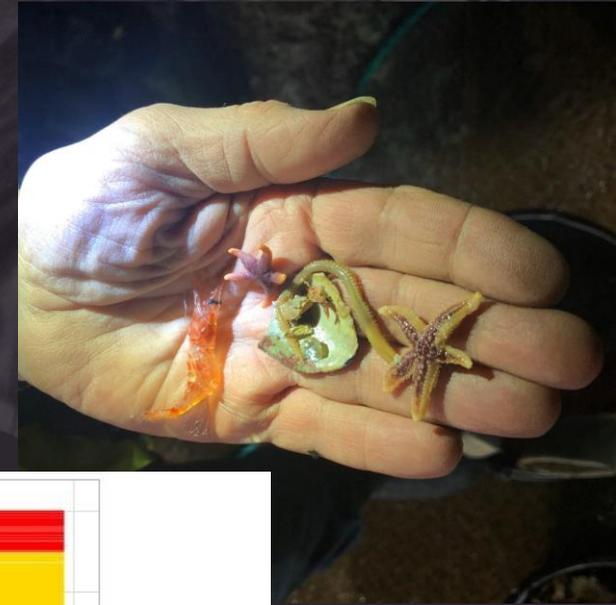
Rethinking how we fish and interact with nature

The field tests in 2019 of the prototype showed:

- Minimal impact on benthic sediment
- Limited change in benthic species composition
- High survival rate of sorted unsized scallops and other species.

During our semi-controlled test runs, **97%** of our targeted species were unharmed.

Proxy for the damage to bycatch.



Graph showing damage on sorted benthic fauna from the harvester. J. Sundet (2019) The effects on benthic fauna from a novel harvest gear for arctic scallops. *Institute of Marine Research*

Our **aims** and objectives



Disruptive
Innovation

▶ **Successfully reopen a new fishery**

Demonstrate the application of new tech to rethink how we fish

Research &
Development

▶ **Investigate the potential of other target species**

Reframe how we perceive ourselves, as the industry, in the systems model

Collaboration

▶ **Science-driven approach to address knowledge gaps**

Communicate effectively for the necessary paradigm shift in the industry