# CIRCULAR PLASTICS IN AQUACULTURE

Plastic has quickly become one of the most used materials worldwide, and because of its durable and versatile nature, it's hard seeing a world without it. These wastes are a serious problem in marine litter. This data was collected to help the mapping of how much plastic flows into the aquaculture sector in 2024.

Legislations assigns responsbility for plastic waste to producers. The perspectives of actors in the entire value chain will influence how effectively these are accepted, and finally how much plastic from aquaculture that ends up as marine litter.

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In 2023, the aquaculture sector in Norway was responsible for generating

## **31 000 tonnes**

of plastic waste.

## WHO IS RESPONSIBLE?

### **Extended Producer Responsibility (EPR)**

legislation is a policy instrument that assigns financial and/or physical responsibility to producers for their products throughout their entire lifecycle. **EPR** is now being extended to Fisheries & Aquaculture sector.

EPR for Aquaculture & fisheries was introduced to address significant environmental concerns, particularly related to marine litter and the promotion of a circular economy.

The legislation has invoked mixed reactions from the stakeholders.

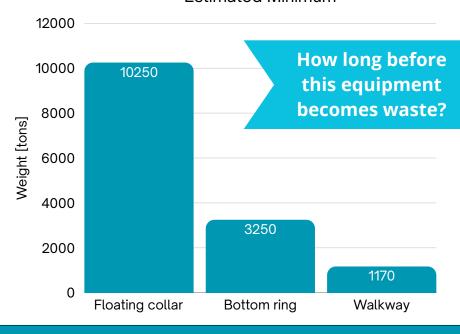
> What stance do they have?

In **2024**, at least

# **18 500 tonnes**

of plastic equipment was introduced to the market. Significant contributors to the total mass were...

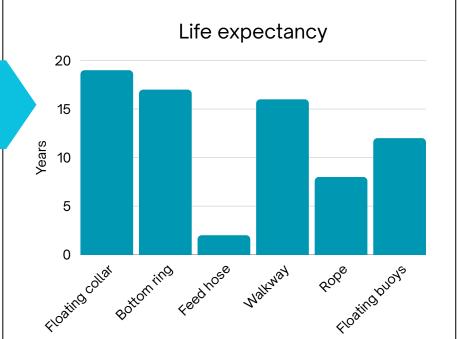
Plastic Equipment Production (2024) **Estimated Minimum** 



#### Though most equipment is repairable, the decision of repair vs. dispose depends on:

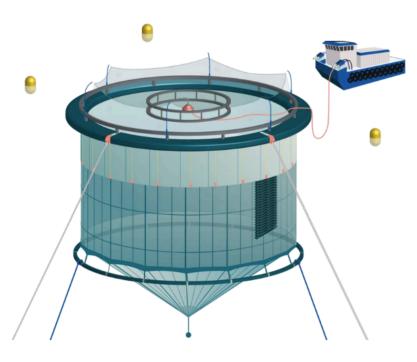
- transportation costs
- certification standards
- available repair facilities

Most fish farming companies send their nets for repair, pro-longing the life-expectancy and ensuring a healthy environment for the fish.



### Which equipment contributes the most per piece?

Flotation rings	15.5 t	
Bottom	7.1	t
Net	5.4	t
Hamster wheel	2.0	t
Hand rail pipes	1.0	t



Aquaculture equipment, sketch from NCE Seafood Innovation (2023)

POSITIVE	NEGATIVE	NEUTRAL
• PROFA	World Wildlife	• Standard
• INNSKIT	Fund	Norway
• SALT	• Wilhelmsen	Norwegian
• Norsirk	• Seafood	Fishermen's
• Directorates of	Norway	Association
Fisheries	• ScaleAQ	ASSociation
Norske Havner	• NXT Catch AS	

#### **HDPE**

was identified as the most commonly used polymer.

HDPE flotation rings are recycled and used to make

- Handrail pipes Walkways
- Walkway pipes
  Feed hoses