BLUEfasma White Paper
Proposing solutions to overcome barriers and support blue Circular Economy in Mediterranean fishery and aquaculture sectors

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Fisheries and aquaculture play an important role in achieving food security, livelihoods and economic development.

EU resources

€19.1 billion

538,350 employed
The EU internal production covers more than 2/3 of its consumption of pelagic fish and more than 1/2 of its consumption of molluscs.

Fifth-largest producer of fishery and aquaculture products

3% of global production (EUMOFA, 2021)

The average person living in the EU consumes 24.4 kg of fish or seafood per year
Fisheries and aquaculture play an important role in achieving food security, livelihoods and economic development.

- 75% of fish consumed come from the wild.
- 25% of fish consumed come from the aquaculture.

In 2019 downward trend of EU catches and a subsequent increase in imports (EUMOFA, 2021).
Methodological Background

- Collection of all the relevant EU and National legislation on sustainable aquaculture and production and consumption in the primary sector and on the circular economy to identify all the updated documents in the relevant topics

- Mapping of relevant UE initiatives

- Analysis of the relevant scientific literature, reports from the international institutions / relevant project, civil society stakeholders / circular economy promoters / relevant market players, statistical reports
Drivers and barriers on Circular Economy in the sustainable fishing and aquaculture sector

Cultural/Social

Institutional/Governance

Economic/Market

Technological/Environmental
Drivers and barriers on Circular Economy in the sustainable fishing and aquaculture sector

Cultural/Social

- Customer culture to buy new products
- Lack of consumer awareness on the externalities of products, including food
- Reduced willingness to pay
Drivers and barriers on Circular Economy in the sustainable fishing and aquaculture sector

Cultural/Social

- resistant company culture
- demographic characteristics

Local communities could play an important role in supporting sustainable fisheries and aquaculture
Drivers and barriers on Circular Economy in the sustainable fishing and aquaculture sector

Institutional

EU policies are currently the main drivers in the adoption of a Circular Economy in fishing and aquaculture.

little or no targeted indication for fisheries or aquaculture
The revision of several pieces of legislation is creating **new opportunities for side-streams** (managed waste with no further use) and **by-products used after processing activities**.

Regulation (EU) No. 2019/1009  
Regulation (EU) No. 142/2011
Drivers and barriers on Circular Economy in the sustainable fishing and aquaculture sector

Institutional

Delays in the adoption of the Maritime Spatial Planning

Lack of heterogeneity

limited circular procurement
Drivers and barriers on Circular Economy in the sustainable fishing and aquaculture sector

Tecnological factors

Promote the eco-design

Life cycle assessment (LCA)
Proposals to foster CE in fishing and aquaculture

Ob.1 - Improve attitudes towards a circular fishing and aquaculture by:

- Promoting knowledge of circularity through a more integrated and collaborative production (and consumption) system to promote sharing economy and the valorisation of unused values (considering the possibility that more than one stakeholder uses the same good several times).

- Adopting a targeted communication strategy to inform other researchers, policy and decision makers and consumers about the best practices and technologies so that they will support the adoption of secondary raw materials and remanufactured goods.

- Upskilling the fishing and aquaculture workforce to be able to make the transition toward a sustainable and circular fishing and aquaculture. Providing complete information and technological knowledge on the environmental, social, and economic benefits that could be achieved.
Proposals to foster CE in fishing and aquaculture

Ob.2 - A review of the current legislation which aims to:

- Adopt end-of-waste criteria for promotion and easy re-use of fishing and aquaculture waste.

- Make IMTA (Integrated Multi-Trophic Aquaculture), biofloc and aquaponics possible in EU countries and encourage related research and technology transfer.

- Adopt sectoral and targeted eco-labelling and certification schemes quality standards, and product stewardship for secondary raw materials to improve the marketability of the products.

- Promote a higher integration in the adoption of EU legislation and reduce heterogeneity among Member States’ legislations.
Proposals to foster CE in fishing and aquaculture

Ob.2 - A review of the current legislation which aims to:

- Support the adoption of the most relevant policies, especially the adoption of **Maritime Spatial Planning** in member countries and the related coastal regions.

- Introduce **agri-environmental payments** for the (positive) **externalities** provided by (sustainable) fishing or (sustainable and/or organic) aquaculture to effectively support ecological transition in the sector.

- Eliminate virgin material subsidies and introduce **taxes or economic incentives** to internalize externalization and make secondary raw materials more achievable.

- Promote measures to reduce marine litter and pollution related to fishing gear abandonment or losses through the application of existing legislation and the promotion of new circular tools (such as return deposit).
Proposals to foster CE in fishing and aquaculture

Ob. 3 - Develop reliable and efficient economic tools by:

- Developing Circular Economy consistent business models for secondary raw materials and by-products to achieve more lucrative markets. It is a strong requirement for opening up these opportunities to the fishing and aquaculture sector.

- Promoting information on the benefits (savings) achievable by an efficient use of resources (energy efficiency and precision aquaculture).

- Promoting information on the benefits (additional earnings and reduced costs) of circular waste management (side streams and by-products) and secondary raw materials.

- Promoting circular (public) procurement to support secondary raw material and remanufactured product markets and low impact products.
Proposals to foster CE in fishing and aquaculture

Ob. 4 - Improve technological aspects through:

- Promoting the eco-design of the whole aquaculture processes from the initial phase of facility design to waste management, re-use and remanufacturing, including energy efficiency and precision aquaculture technologies and practices.

- Reviewing current LCA and other indicators in order to demonstrate the effective performance of secondary raw materials.

- Promoting the diffusion of new materials and tools to reduce the environmental impact related to fishing gear, especially plastic pollution.
Thank you for the attention