



New EMFF project "BIOGEARS" launched to develop biobased ropes for aquaculture

Press release: December 2019

BIOGEARS is a new innovative project funded by the European Union under the European Maritime and Fisheries Fund that is set to develop **biobased gear solutions for the creation of an eco-friendly offshore aquaculture sector using a multitrophic approach and new biobased value chains.**

The project aims to provide the European aquaculture sector with innovative products and a value chain to challenge the existing gap of biobased ropes for offshore aquaculture, nowadays manufactured with 100% non-recyclable plastics. **BIOGEARS** will foster an eco-friendly aquaculture industry with the results of the project creating a biobased value chain under the EU Bioeconomy Strategy framework. **BIOGEARS** uses an Integrated Multi-Trophic Aquaculture (IMTA) approach by integrating seaweed with mussel production, which aims to increase aquaculture marketable products.

The current use of biobased plastic (produced from biomass renewable resources that can biodegrade in different environmental conditions) only represents about one percent of the 335 million tonnes of plastic produced annually. The **BIOGEARS** project will develop biobased ropes that though durable and fit-for-purpose, still biodegrade in a shorter time and can be sustainably managed by local composting facilities. The project therefore follows the principles of the EU's Bioeconomy Strategy and supports forthcoming policy on marine litter and plastic use.

It is important to balance the functionality and biodegradation behaviour of the biobased ropes in order to develop the right biobased formulation for the aquaculture sector. The research, prototype development and pilot tests taking place in **BIOGEARS** will aim to reduce the current technological gaps and extend the current potential use in the sector.

As part of the project a **BLUE LAB** will be created to enhance cooperation between all partners of the project and enable them to track innovation related to the application of their new biobased materials to develop aquaculture ropes. It will be supported by knowledge transfer activities throughout the project to ensure that results and new biobased products will reach relevant end users and transform the aquaculture sector.

At the kick-off meeting on 11 December 2019 in AZTI offices in Derio, Spain, we heard from the Project Coordinator Leire Arantzamendi that **BIOGEARS** hopes to boost more eco-friendly mussel and seaweed production. She said "We will generate three rope prototypes with a highly reduced carbon footprint along the whole value chain. The aim is to develop these as marketable products, whilst minimising the potential of aquaculture to generate marine litter or release plastic to the sea." As the only project within the EMFF-BlueEconomy-2018 (Blue Labs) call that has a geographical focus on the Atlantic Basin **BIOGEARS** therefore represents an exciting research area for this region.

More information coming soon on www.biogears.eu

Follow us on twitter: [@BIOGEARS_EU](https://twitter.com/BIOGEARS_EU)

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Caption: *Members of the BIOGEARS consortium with first prototype rope at the project's kick-off meeting in Derio in December 2019*



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Notes for the Editor:

Europe's **Bioeconomy Strategy**, initially launched in 2012 and updated in 2018, addresses the production of renewable biological resources and their conversion into vital products and bioenergy. The updated Strategy aims to accelerate the deployment of a sustainable European bioeconomy to maximise its contribution toward the 2030 Agenda, the SDGs and the Paris Agreement. The Strategy has three tiers: 1. Strengthen and scale up the bio-based sectors, unlock investments and markets; 2. Deploy local bioeconomies rapidly across the whole of Europe; 3. Understand the ecological boundaries of the bioeconomy.

The **BIOGEARS** project will run from 2019 – 2022 with an EU contribution of €945,000, funded by the European Union EASME EMFF programme under the EMFF-0102018 Blue Labs call.

There are five partners in the consortium: AZTI, GAIKER and ITSASKORDA from Spain, Centexbel from Belgium and Intrigo from Ireland. BIOGEARS is coordinated by AZTI and Intrigo Ltd is the project communication, dissemination and outreach partner.