



Flexible biorefinery to valorise discards and by-products of the European fish and seafood production (LIFE REFISH)

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NAME: Flexible biorefinery to valorise discards and by-products of the European fish and seafood production (LIFE REFISH).
LOCATION: Spain (Galicia).
BUDGET: 3.045 304.53 €
FINANCING: European Union's LIFE PROGRAMME 60% (1.827.180,01€)
DURATION: 2022-2025

The Project fits into the LIFE programme 2021-2027. This is the only EU funding programme entirely dedicated to environmental, climate and energy objectives. It contributes to the shift towards a clean, circular, energy efficient, climate-neutral and climate-resilient economy, including through the transition to clean energy, to protect and improve the quality of the environment.



The LIFE REFISH aims to create the first demo biorefinery for fish and seafood raw matter that, through implementing the latest technology, enables the valorisation of this currently underutilised fish and seafood resources into high value-added products with large market potential.

The consortium of the LIFE REFISH Project will for the first-time join key international players in the fishing and aquaculture industries (JEALSA, PESCANOVA, STOLT, OPROMAR), experts in the development of functional ingredients (VALORA) and a leading research institution in the field of marine resources and food waste valorisation (CSIC). Together, the LIFE REFISH partners will implement an innovative solution able to create additional value from landed discards resulting from the LO application and fish and seafood processing by-products.





The LIFE REFISH **objectives & scope** are:

1. To determine the composition, optimum conditions and parameters required for the pre-handling, conditioning and storage of discards.
2. To scale up and demonstrate the viability of a demo scale biorefinery able to valorise a 300 kg/h of discards and by-products.
3. To validate the performance and commercial value of the eight high value-added products resulting from the valorization process.
4. To take the necessary steps to prepare the production at industrial scale (4 tonnes/h) and commercialization.
5. To assess the environmental, social and economic impacts.
6. To raise awareness among relevant target audiences on the environmental problems related to discarding and the EU environmental policies to curb this practice.

To achieve these objectives, the Project is divided into seven '**work packages**' or activities:

1. Project management and coordination
2. Raw material pre-conditioning and profiling
3. Biorefinery scale-up and process validation
4. Validation of high value-added products with target customers
5. Sustainability, replication and exploitation of project results
6. Impact monitoring and evaluation with KPIs Reporting
7. Dissemination and communication

The **expected results and impacts** are:

Environmental:

1. Resource efficiency
2. Biodiversity: Number of species
3. Biodiversity: Reduced rate of fish infection with anisakis
4. Reduced GHG emissions from fishing operations

Economic – societal:

1. Creation of extra revenue in European coastal areas
2. Creation of new job positions in European coastal areas
3. Increased awareness among fishers and relevant fish and seafood industry stakeholders

Then, the LIFE REFISH **contributes to**:

- The European Green Deal:
 - The Farm to Fork strategy
 - The EU's circular economy action
 - The zero-pollution action plan
- The EU Blue Growth Strategy
- Regulation (EU) No. 508/2014

For more information, see the LIFE REFISH website at <https://liferefish.com/>