SuMaFood

Sustainable preservation of marine biomasses for an enhanced food value chain

About the Project

SuMaFood is a 7-way transnational partnership between 3 industrial partners, 3 universities, and 1 R&D research institute from Greece, Norway, Romania, and Spain, respectively. In addition, the project Consortium has four associated partners that will contribute with biomass to the project and through their involvement in an External Industry Advisory Board. SuMaFood will be coordinated by SINTEF Energy Research (Norway).

The project addresses innovative utilization of marine biomasses and by-products and will demonstrate how such resources can be made available and attractive to the consumers, thus adding value to the biomass food chain. Two demo cases at TRL 6, one for a salmon slaughter plant and another for seaweed, will be established to demonstrate waste reduction, extend product ranges, enhance product quality and stability, and to provide unique products in a growing marine food chain.

The main objective of SuMaFood is to develop and demonstrate ecoinnovative preservation solutions for marine biomasses. The target products are marine biomass powders that can be used as food (including re-structured and health nutrition products), ingredients, or feed. The project addresses techniques for separation and fractioning of fish residues and preservation techniques of marine biomasses in terms of energy efficiency, product quality and stability, and shelf-life prolongation. Three novel drying technologies will be applied to marine biomasses in the project and compared for cost efficiency and product quality. The project reaches out to downstream stages of the blue biomass value chain by investigating novel techniques of active packing and formulation using antioxidants; preservation methods tailored to prolong shelf-lives and promote enhanced consumer acceptance. By demonstration of enhanced utilization of marine biomasses, SuMaFood will contribute to valuable growth an increased sustainability in European blue bioeconomy value chains.



Project Overview

1st Additional Call | 2021

Project Partners:

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- Dr. Ignat Tolstorebrov
 Norwegian University of Science
 and Technology,
 Energy and Process Technology.
- Prof. Liviu Gaceu
 Transilvania University of Brasov, Eco-biotechnologies and Equipment for Food and Agriculture, Faculty of Food and Tourism.
- Mr. Aritz Lecuona EKONEK Innovación en Valorización de Subproductos S.L., R+D.
- Prof. Petros Taoukis National Technical University of Athens, School of Chemical Engineering.
- Mr. Frode Blålid
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- Dr. Costas TROULOS FORTH/Praxi Network, Technology Transfer Office.

Keywords:

Fish residues, Seaweed, Marine powders, Biomass waste reduction, Efficient sustainable production

Priority Area:

Advancing the supply systems in the blue bioeconomy value chains

