

BlueBioChain

Novel biorefinery supply chains for wastewater valorization and production of high market value bio products using microalgae

About the Project

BlueBioChain will develop (TRL2) and apply (TRL5) a holistic biorefinery platform bridging the gap along the blue bioeconomy value chain, from biomass to products and markets and consumers. The project will last 24 months and will provide an intelligent wastewater valorization system using microalgae for the pilot production of 3 categories of high market value products, namely a) cosmeceuticals (skin cream), b) food additives (food coloring agents for novel, convenient meat, and dairy analogues) and c) zero-waste aquaculture farms (aquafeed for fish/arthropods feed); thus, addressing three major global challenges of the future; sustainable waste management, tackling water scarcity and lack of food for the growing global population. Without any doubt, one of this project's great strengths lies in its consortium. BlueBioChain consortium is made up of 8 partners from 5 geographically distributed EU countries (Belgium, Denmark, Greece, Iceland, and Malta) covering 3 Universities (Technical University of Denmark, KU Leuven, Malta University), 3 Research centers (Hellenic Agricultural Organisation- DEMETER, Center of Research and Technology-Hellas, Matís), 1 SME (EcoResources) and 1 Industry (KMC). It unites the necessary multidisciplinary knowledge, expertise, skills, and resources to constitute a complete value chain of actors for capitalizing on the opportunities of developing novel biorefinery platforms for waste water valorization and production of high market value bio-based products using microalgal biomass creating ultimate synergies for developing circular bioeconomy concepts.



Project Overview

1st Additional Call | 2021

Project Partners:

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Keywords:

blue value chain,
wastewater valorisation,
microalgae cultivation,
nutrient upcycling,
food-feedcosmeceuticals

Priority Area:

Advancing the supply systems
in the blue bioeconomy
value chains



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