

BlueGreenFeed

Synergy of blue and green sectors for resilient biomass production and processing to develop sustainable feed ingredients for European aquaculture

About the Project

Aquaculture production is one of the most effective ways to produce animal protein and this sector has a high potential for sustainable jobs creation and growth. However, a major challenge is the urgent need for nutritious and sustainable feed resources. BlueGreenFeed will focus on producing new feed ingredients, that can to some extent replace soy proteins. The project aims to increase resource utilization in bio-based industries and contribute to the transition to a sustainable blue economy - in line with EU's Bioeconomy and Circular economy strategies.

BlueGreenFeed aims for value increase and profitability for the industry by finding new markets for underutilised green co-streams by converting them into nutritional and sustainable feed ingredients. The project will explore ways to pre-treat and process feathers and grass pulp to increase their digestibility and bioavailability for use in feed for low trophic animals such as insects (house crickets and meal worms) and aquatic invertebrates (gammarid shrimps and polychaete worms). The ability of these organisms to grow and bio-convert the nutritionally poor substrates into nutritious biomass will be tested. The nutritional value of these organisms and their suitability as aquafeeds in fish feeding trials will be evaluated. Economically feasible and sustainable ways for bio-upgrading low value side streams into high value proteins and lipids for feed industries will be proposed after in depth economic and sustainability analysis.

The inter-disciplinary BlueGreenFeed team consists of research experts (SINTEF, Taltech, Aarhus University, MATIS, University of Iceland}, working in close cooperation with active industrial partners, representing each sector in the value chain ranging from grass processing (Vestjyllands Andel), via the feather generating industry (Norsk kylling}, to insect producers (Bugimine, Montasjen) and a fish feed company (Laxa).



Project Overview

2. Additional Call | 2022

Project Partners:

- **Dr Rasa Slizyte**
SINTEF OCEAN AS
- **Prof Søren Krogh Jensen** Aarhus University
- **Dr Loreida Timberg** Tallinn University of Technology Estonian Maritime Academy
- **Dr Stefan Eysteinnsson** Matis Icelandic Food and Biotech R&D
- **Dr Ólafur Ögmundarson** University of Iceland
- **Mr Gunnar Orn Kristjansson** Fodurverksmidjan Laxa hf
- **Mrs Kine Ariela Egseth** Montasjen AS
- **Dr Kristian Knage-Drangsfeldt** Vestjyllands Andel

Keywords:

Priority Area:

Sustainable and resilient biomass production and processing.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement 817992.