



# Portfolio of Outputs and Commercialisation Needs

## BIORAS SHRIMP

Improvement and innovation of a BIO-secure Recirculating Aquaculture System for SHRIMP and additional biomass circular production

[www.bioras-shrimp.eu](http://www.bioras-shrimp.eu)

Project consortium includes 4 SMEs:



## Outputs

### Clear water RAS



TRL 6

Recirculating aquaculture system for shrimp rearing with improved technology and husbandry efficiency.

### Hybrid RAS-BFT farming system



TRL 5

Recirculating aquaculture system for shrimp rearing using biofloc as a protein rich feed source.

### Effluent Treatment



TRL 7

State-of-the-art stream treatment technology for management and reuse of waste solids and dissolved substances.

### AI-based water quality monitoring system



TRL 4

Optimised system design using Artificial Intelligence (AI), real time sensors, and Internet of Things (IoT) to facilitate daily operations.

### Algae Culture and Aquaponics



TRL 3

Integrated systems to valorise nutrients from shrimp effluent and biomass production for expression of valuable bioactive molecules.

## Commercialisation Needs

Scale up of closed aquaculture systems (RAS & RAS-BFT)

Facilities for fertiliser production from effluent waste

Scale up of 'green' extraction methods

New product development from plant and microalgal extracts

Market analysis for side products valorisation