



"Eco-Efficient Technologies Development for Environmental Improvement of Aquaculture "(AQUASEF)

LIFE 13 ENV/ES/000420



Eco-Efficient Technologies Development for Environmental Improvement of Aquaculture

LIFE + AQUASEF

COORDINATING BENEFICIARY

ARIEMA Energía y Medio Ambiente S.L.

PARTNERS

- Esteros de Canela S.A.
- Fundación Centro Tecnológico de Acuicultura de Andalucía, CTAQUA
- Drops & Bubbles Tecnología S.L.
- Heliotrónica Sistemas S.L.
- INOMA RENOVABLES, S.L.

CONTACT

Project Manager: Maribel Rodriguez Olmo

E-mail: maribel.rodriguez@ariema.com

Phone: +34 91 804 53 72

Website: www.ariema.com

DESCRIPTION

The project aims to reduce emissions from aquaculture production through the development of innovative technologies and by combining best operational practices. Maximizing synergies with key on-going processes at the site will benefit the mitigation strategy, i.e.: microalgae culture will provide feed supplies to fish nutrition and it will help to fix a large part of the CO₂ generated by the boilers used to warm water for the hatcheries.



OBJECTIVE

The project comprises 7 main activities:

1. **Contribute to the sustainability of the aquaculture activity on the ground**, implementation of the commitments of the EU under the Kyoto Protocol of the UNFCCC, including commitments to reduce EU greenhouse gas emissions by 2020 by the application of good practice which facilitates management.
2. **Demonstration of the environmental benefits of the process of energy generation** in the aquaculture installations through the replacement of traditional systems that use fossil fuels by others which use renewable energy.
3. **Demonstration of hydrogen and fuel cells technologies** applied to the aquaculture sector.
4. Demonstration of the environmental advantages of fish feeding oxygenate tanks through **efficient aeration systems** allowing to dispense the use of liquid oxygen.
5. **Optimization of microalgae cultivation** techniques as added value to the production of fish and mollusks by CO₂ fixation, nutritional supplement in their diet and also as effluents purification of culture tanks.
6. Validation and verification of the usefulness and **efficiency of the implemented technologies**.
7. **Dissemination** and technology transfer activities.

INDUSTRIES

- Aquaculture industry
- Renewable energy industry
- Other industries

MORE INFORMATION

Networking and dissemination with other projects. Proposed activities:

- Combined meetings with other projects with specific objectives
- Interest in future projects, partner's search, other collaborations