



Innovative multi-use prototype combining offshore renewable energy and aquaculture in the Atlantic Basin

D7.9 PROJECT FACTSHEET

Grant Agreement n°. 101077600



Co-funded by
the European Union

Version History

| Ver. | Date | Comments/Changes | Author/Reviewer |
|------|------------|------------------------|---|
| 1.0 | 16/01/2023 | Project factsheet V1.0 | Teresa Gubern, Beatrice Avagnina, Michelle Perello, Tamara Ventura (CE) |

Deliverable Information

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|---|---|--|
| Project Acronym | AquaWind | |
| Project Title | Innovative multi-use prototype combining offshore renewable energy and aquaculture in the Atlantic Basin | |
| Call | EMFAF-2021-PIA-FLAGSHIP | |
| Type of action | EMFAF-PJG EMFAF Project Grants | |
| Granting authority | The European Climate, Infrastructure and Environment Executive Agency (CINEA) | |
| Project Start Date | 01/09/2022 | |
| Project Duration | 36 months | |
| Work Package | WP7 Dissemination and Communication, RRI, Public engagement | |
| Deliverable | D7.9 Project Factsheet | |
| Due Date | 31/01/2023 | |
| Submission Date | 16/01/2023 | |
| Dissemination Level ¹ | PU | |
| Deliverable Responsible | Consulta Europa (CE) | |
| Type | Document, report | |
| Version | 1 | |
| Status | Final | |
| Author(s) | Teresa Gubern, Beatrice Avagnina, Tamara Ventura, Michelle Perello | CE |
| Reviewer(s) | Javier Roo, Rafael Ginés, Almudena Suárez, Gordon Dalton, Elba Bueno, Mónica Quesada, Pedro Mayorga, Maria Ikhennicheu, Inês Machado, Alfred Mormeneo | GOBCAN ULPGC FCPCT PLOCAN CMC EnerOcean Innosea WAVEC CANEXMAR |

¹ PU= Public, SEN=Sensitive



Acronyms & Abbreviations

| | |
|--------------|---|
| CO | Project Coordinator |
| EC | European Commission |
| EU | European Union |
| CINEA | European Climate, Infrastructure and Environment Executive Agency |
| MU | Multi-use |
| WP | Work Package |



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Project Factsheet

| PROJECT FACTSHEET <i>(max 3-4 pages)</i> | | | | | | | | | | | | | | | | | |
|--|---|---------------------------|-------------------------------------|--------------|--------------------------|-------------|-------------------------------------|---|--------------------------|---------------------------------|--------------------------|-----------------------|--------------------------|---|--------------------------|-------------------------|--------------------------|
| PROJECT | | | | | | | | | | | | | | | | | |
| Project acronym and number: | AquaWind - 101077600 | | | | | | | | | | | | | | | | |
| Summary <i>(max 100 words)</i> <i>Explain the quintessence of the project. Mention the topic, the type of project as well as the expected results.</i> | | | | | | | | | | | | | | | | | |
| <p>AquaWind will perform a demonstration test of a multi-use (MU) integrated and co-located solution by joining an existing marine renewable energy production - the W2Power prototype - with an innovative aquaculture solution. This will include a tailor-made design fish cage with novel net materials, a high level of digitalization and species diversification. Whereas the W2Power prototype will consist of floating wind technology. Furthermore, AquaWind will demonstrate how the joint activity can be remotely operated and how one activity might affect the other. AquaWind will provide real data to demonstrate the economic, environmental, and social sustainability of the MU proposal.</p> | | | | | | | | | | | | | | | | | |
| Context <i>(max 100 words)</i> <i>Describe the background of the project and its link to EU maritime and fisheries policy. What is the problem/challenge addressed by this project? Why?</i> | | | | | | | | | | | | | | | | | |
| <p>AquaWind is born from the need to support the expansion of the Blue Economy while ensuring climate change adaptation and ecological transition. This is even more true for Atlantic coasts, islands and outermost regions which depend heavily on Blue Economy, on making sea activities sustainable and on their capacity to respond to climate change and preserve biodiversity. Specifically, the main challenges are related to the need for stronger and faster decarbonisation of both sectors, to ensure close healthy fish and seafood provision, to avoid conflicts with coastal activities, to acquire practical experiences of multi-use, and to further develop marine renewable energy.</p> | | | | | | | | | | | | | | | | | |
| Main policy area: | <table border="0"> <tbody> <tr> <td>Offshore renewable energy</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>Ocean health</td> <td><input type="checkbox"/></td> </tr> <tr> <td>Aquaculture</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>Sustainable tourism and cultural heritage</td> <td><input type="checkbox"/></td> </tr> <tr> <td>Sustainable and smart transport</td> <td><input type="checkbox"/></td> </tr> <tr> <td>Algae and bio-economy</td> <td><input type="checkbox"/></td> </tr> <tr> <td>Sustainable fisheries (incl. scientific advice)</td> <td><input type="checkbox"/></td> </tr> <tr> <td>Blue careers and skills</td> <td><input type="checkbox"/></td> </tr> </tbody> </table> | Offshore renewable energy | <input checked="" type="checkbox"/> | Ocean health | <input type="checkbox"/> | Aquaculture | <input checked="" type="checkbox"/> | Sustainable tourism and cultural heritage | <input type="checkbox"/> | Sustainable and smart transport | <input type="checkbox"/> | Algae and bio-economy | <input type="checkbox"/> | Sustainable fisheries (incl. scientific advice) | <input type="checkbox"/> | Blue careers and skills | <input type="checkbox"/> |
| Offshore renewable energy | <input checked="" type="checkbox"/> | | | | | | | | | | | | | | | | |
| Ocean health | <input type="checkbox"/> | | | | | | | | | | | | | | | | |
| Aquaculture | <input checked="" type="checkbox"/> | | | | | | | | | | | | | | | | |
| Sustainable tourism and cultural heritage | <input type="checkbox"/> | | | | | | | | | | | | | | | | |
| Sustainable and smart transport | <input type="checkbox"/> | | | | | | | | | | | | | | | | |
| Algae and bio-economy | <input type="checkbox"/> | | | | | | | | | | | | | | | | |
| Sustainable fisheries (incl. scientific advice) | <input type="checkbox"/> | | | | | | | | | | | | | | | | |
| Blue careers and skills | <input type="checkbox"/> | | | | | | | | | | | | | | | | |



| | | |
|---|--------------------------------|-------------------------------------|
| | Maritime spatial planning | <input checked="" type="checkbox"/> |
| | Maritime security | <input type="checkbox"/> |
| | International ocean governance | <input type="checkbox"/> |
| | Ocean literacy | <input type="checkbox"/> |
| Sea basin: | Atlantic | <input checked="" type="checkbox"/> |
| | Baltic | <input type="checkbox"/> |
| | Mediterranean | <input type="checkbox"/> |
| | Westmed | <input type="checkbox"/> |
| | Black Sea | <input type="checkbox"/> |
| | North Sea | <input type="checkbox"/> |
| | Outermost regions | <input checked="" type="checkbox"/> |
| Activities (max 100 words) | | |
| <i>What were the main activities carried out and how were they carried out?</i> | | |
| <p>The main project objective is the test of both offshore wind energy generation prototype together with aquaculture. First, legal permits will be achieved (WP1), along with a deep stakeholder engagement study and a circular approach model (WP1). Work will be done on the prototype (WP2) and aquaculture cage (WP3). W2Power will be deployed at the site, the cage will be fitted and the test with the fish and the energy generation will be carried out (WP4). Finally, the exploitation strategy will be built along with policy makers' recommendations (WP5). Dissemination (WP7) and Coordination (WP6) activities will be ensured as well.</p> | | |
| Results achieved (max 100 words) | | |
| <i>Describe the outcomes and results achieved by the project. What is the benefit to the participants and the main stakeholders? What is the expected improvement and impact on the ground (on the economy, society, environment etc.)?</i> | | |
| <p>The main project results will be the test and assessment of Seriola aquaculture production combined with energy generation. The final outcome will be to demonstrate that aquaculture and offshore energy can work in combination.</p> <p>Along with this achievement, an environmental impact assessment and circular approach will be carried out to demonstrate the sustainability of the MU solution. These two assessments would have been used at the same time to improve the MU prototype and guarantee the smallest CO₂ footprint. Subsequently, business opportunities would be investigated to exploit the invention in the market.</p> | | |



Policy contribution (max 100 words)

Does the project contribute to a specific EU policy? If so, which one and how?

The project **supports the development and uptake of MU** between marine renewable energies and other Blue Economy activities (aquaculture) and, thus, contributes to the **Atlantic Maritime Strategy priority** to develop marine renewable energy and the sustainable expansion of the Blue Economy in the Atlantic Basin. Furthermore, AquaWind focuses on specific solutions suggested for MU projects that were specifically encouraged in the EU Commission's Communication (**COM(2021) 236**) providing guidelines for a more **sustainable and competitive EU aquaculture for 2021 to 2030**.

Synergies with other EU funding (max 100 words)

Are there synergies with other EU-funded projects. If relevant, please name projects.

Networking events and synergies will be created with the sister project from the same call and under the same topic, FLORA - FLOating Radar. Lessons can also be learnt from the other related topics projects of the call such as 4BIZ, and DBAN working on Blue Economy investment and innovation capacity building pilot. Other EU and national projects that will be relevant for networking events and synergies are MUSICA, UNITED and PLANASER. The first two also work on MU in the Canary Islands. Lastly, PLANASER is the Spanish plan for aquaculture and will prove useful for the aquaculture section.


Other (max 100 words)

Are there any other elements about the project relevant for being mentioned, including possible risks of not achieving its original objectives?





n/a.

PARTICIPANTS**Participants**






Who is behind the project?

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The consortium is multi-actor and multidisciplinary and includes 9 partners in total from 3 EU countries: one regional authority, 5 companies and private research organizations, one university, and one cluster representing companies and civil society organizations. The partners are:

-  The Coordinator - CO: Canary Islands Agency for Research, Innovation and the Information Society (ACIISI) as part of the Canary Islands Government (GOBCAN)
-  Consulta Europa Projects & Innovations (CE)
-  University of Las Palmas de Gran Canaria (ULPGC) together with the Canary Islands Science and Technology Park Foundation (FCPCT)
-  Oceanic Platform of the Canary Islands (PLOCAN)



-  Maritime cluster of Canary Islands (CMC)
-  EnerOcean (EO)
-  Innosea
-  Wavec
-  Canexmar

Testimonies from the project:

"It is the first floating wind platform, built and installed in Spain, which has two wind turbines, and which has reached this level of technological development in the world. In addition, it will be a pioneering prototype in developing real tests of the viability of marine fish production in a combined system" - AquaWind Coordinator (GOBCAN).

"We must remember that it is the only European initiative that combines the production of renewable energy on the high seas and fish farming in the first floating wind platform in Spain, capable of jointly producing wind energy and high-quality fish" - AquaWind Coordinator (GOBCAN).

"The W2Power concept seeks to be the most profitable floating wind solution and reduce the global cost of energy, thanks to the novelty of incorporating two high-capacity wind turbines and the possibility of housing additional functions due to the size and stability of the platform, such as the aquaculture, energy storage or harnessing wave energy" - WP2 Leader (EnerOcean), partner that provides the W2Power prototype to the project.

RESULTS AND ACHIEVEMENTS

Results and achievements

List the project results.

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The main results will be:

1. **New concepts for multi-use**, offshore renewable energy solutions in the sustainable Blue Economy.
2. A **framework for integrated planning and multi-use**.
3. **Increased co-location of Blue Economy activities** for more sustainable use of marine space
4. New **partnerships** between the renewable energy industry and corporates/investors from other maritime sectors.
5. An increased **understanding** of, and **evidence** of, the **environmental and social impacts** (positive and negative) of multi-use, offshore renewable energy solutions.
6. **Sustainable new business opportunities** and job prospects in the sustainable Blue Economy with a clear case and strategy for continuation beyond the pilot stage.



PHOTOS AND VISUALS

Photos and visuals

Illustrate the project with visual supports, such as pictures of events, illustrations, infographics, visual arts or videos.

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Figure 1. Pictures of the Kickoff meeting, the site visit, and the presentation of AquaWind at the Spanish National Congress of Aquaculture.



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