

Seaweed

Ocean Health focusses on a number of types of seaweed, the restoration of which are each approached in a unique and innovative way. By exploring system specific techniques in collection, planting and synergies for outplacement of seaweed (installations), we aim to boost the scale and value that seaweed restoration and ecological enhancements bring for the environment, economy and society.

Ocean Health is applying various techniques to make large scale seaweed projects with a positive impact on biodiversity and ecosystem services value with trusted partners.

Recent project - 2023

Black Sea coast, Romania

Contracted to design, build and perform the coastal infrastructural works, we had the opportunity to design for the suitable abiotic conditions to suit Cystoseira barbata, a brown alga:

- Investigate synergies with coastal construction, planning and design
- Improve biodiversity through habitat creation
- Development and implementation of robust, cost-effective and scalable seaweed outplacement techniques

Our solutions

- Kelp: investigating seeding and installation methodologies, we aim to strengthen
 the value chain of kelp that boosts biodiversity, contribute to carbon sequestration
 and can be the foundation for bio-based products.
- Sargassum: collaborating with local partners, NGOs and technological innovators to pilot methods to collect floating sargassum and treat it to produce biobased products and biogas.
- Shared use of coastal infrastructure and offshore windfarms: design and outplacement of seaweed installations for restoration within coastal infrastructure and within the footprint of offshore wind parks.

Processes

Ocean Health uses advanced design solutions to benefit biodiversity in and around its construction works. Factors that contribute to the success of a Seaweed project are:

- Suitability of the present system to permit Seaweed to thrive
- Availability of appropriate equipment and supplies
- Availability of environmental conditions and operational periods
- Early involvement of Ocean Health in the Seaweed design process
- Clear client requirements on project requirements and criteria
- Early start of project engineering preparation works

Creating value



Restoring ecosystems



Water purifier



Local tourism development



Bio-based economic value



Protect and enhance biodiversity

Our added value

Scale

Unique expertise to conserve, enhance seaweed cover and deliver biodiversity net gain as part of the engineering and execution of large scale marine construction projects

Ingenuity

Before introducing targeted species, we seek for local system understanding and design for the optimum physical boundary conditions for ecosystem development to kick-start seaweed regeneration and to strive for long-term stability

