



**Revolutionize Offshore Production
with UNITED: Seaweed Cultivation
and Offshore Solar**





Are you an offshore developer or investor looking for the next big opportunity in sustainable solutions?

Look no further than the UNITED project pilot in the Netherlands, a pioneering initiative that is exploring the untapped potential of seaweed cultivation and offshore solar energy production in the offshore environment.

Located 12 kilometres off the coast of The Hague in the Netherlands, the North Sea Farmers Offshore Test Site is an incubator for the development and upscaling of innovative technologies in truly offshore conditions.

Are you interested in acquiring seaweed? We have you covered!

The Seaweed Company is leading the seaweed cultivation pilot, where they aim to demonstrate the technical and economic feasibility of integrating seaweed cultivation into an offshore wind farm. Seaweed is a versatile resource with numerous commercial applications, including use in cosmetics, food, fuel, and building materials. Industrial production of high-quality seaweed has the potential to be a lucrative business, and combining it with wind farming could lower costs and increase overall efficiency.

The UNITED project pilot is working to develop economically viable and technically feasible seaweed cultivation in challenging offshore conditions, and to demonstrate that it can be integrated into wind farms. In the latest update, we are pleased to report that The Seaweed Company, North Sea Farmers, CIV Den Oever, and Boeg BV Constructiewerken have successfully harvested the seaweed nets using an automated machine that was specially developed for the project.

KEY PRODUCTS OF THE PILOT

*Small data buoy and telemetry for multi-use
(still to be installed and tested)*

Seaweed cultivation system including seeding & harvesting machine



Unleashing the Full Potential of the Sea: Invest in the Offshore Solar Technology Revolution!

The North Sea Farmers Offshore Test Site is also home to the offshore solar energy pilot led by Oceans of Energy. Oceans of Energy started using this Offshore Test Site in 2020, and now has 3 years of operational experience under the belt. The pilot solar farm has successfully withstood wave heights up to 10 meters and windspeeds over 100 km/h. Recently, Oceans of Energy received *Approval in Principle* from Bureau Veritas for its high-wave offshore solar system design, the first in the world! Oceans of Energy is now ready for large scale roll out of the technology within wind parks.

Within UNITED, Oceans of Energy worked together with The Seaweed Company and the North Sea Farmers on joint O&M activities, where possible. With Deltares, we quantified the wave dampening effect of floating solar, potentially interesting for offshore aquaculture activities. Thirdly, together with TNO we made a first assessment on opportunities for joined O&M between wind and solar and finally, with TNO and Ventolines together, we looked into the techno-economic feasibility of various solutions on integrating offshore solar at wind parks.

KEY PRODUCTS OF THE PILOT

Offshore solar installation technology

**Join us in revolutionizing offshore production
with seaweed cultivation and floating solar!**

North Sea Farmers is a seaweed sector organisation that wants to accelerate the roll-out of multi-use within offshore wind farms with their Offshore Test Site. Within the UNITED project floating solar and seaweed cultivation were successfully combined for the first time offshore. A great step towards multi-use within offshore wind farms.

KEY SERVICE OFFER OF THE PILOT

Offshore Test Site with corresponding services like a work permit system & 24/7 remote monitoring and support towards multi-use within an offshore wind farm.



DISCOVER THE OTHER UNITED PILOTS

GERMANY

1



DENMARK

4



NETHERLANDS

2



BELGIUM

3



GREECE

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