



BAMBOO

Build scAled Modular Bamboo-inspired Offshore sOLar systems



**Funded by
the European Union**

This project has received funding from the European Union's Horizon Europe research and innovation programme under Grant Agreement number 101136142. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Climate, Infrastructure and Environment Executive Agency (CINEA). Neither the European Union nor the granting authority can be held responsible for them.

The concept



Development of Standard 1km²-scale offshore solar farm of 150-200MW to fit in-between four wind turbines



Project starting and end date: 1 January 2024 - 31 December 2026

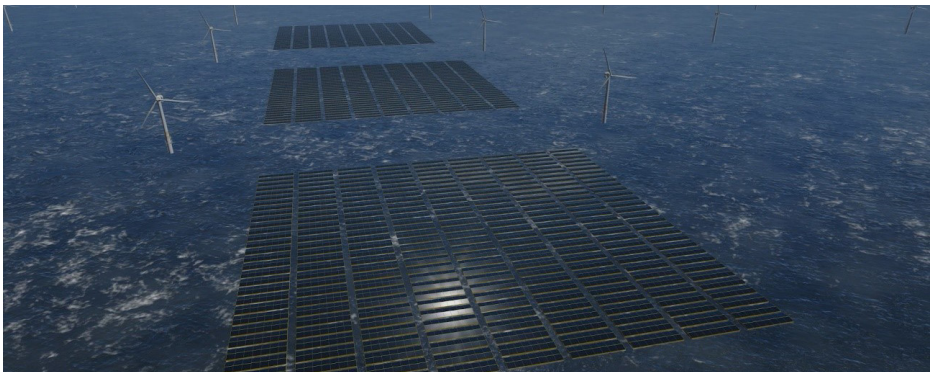


15 partners from 9 EU countries and UK

Lightweight, extremely strong, flexible, sustainable - are the fundamental characteristics of the bamboo-plant-inspired design philosophy of the technology to withstand the offshore environment.

BAMBOO is a visionary project transforming Europe's approach to renewable energy. Our goal is ambitious: to develop a groundbreaking offshore solar system spanning 1 km² and capable of producing 150 MW of clean electricity. This initiative is set to become a model for future offshore solar projects, crucial for Europe's climate goals for 2030 and 2050.

Oceans of Energy is a pioneer in offshore solar. Its mission is to bring clean and abundant renewable energy, in harmony with nature, to people living along the coasts worldwide. The company deployed the world's first offshore solar farm engineered to withstand the high waves of the Dutch North Sea in 2019. Now, Oceans of Energy is making history again by building the first offshore solar farm to be installed within a wind park area: the Shell/Eneco Hollandse Kust Noord offshore wind farm in the North Sea.



The approach

This innovative approach not only boosts energy production but also uses maritime space efficiently and sustainably, leaving more sea space left untouched for nature, recreation, fishing or other Blue Economy activities.

Faced with the challenges of the sea's harsh conditions, BAMBOO will advance the said technology through cutting-edge innovations. The project includes the world's first large-scale tests for offshore solar systems at sea and will develop a unique floating substation designed for these conditions. The project is furthermore contributing to developing new standards in offshore solar technology.



The mission

In BAMBOO, fifteen leading European organisations will collaborate to scale up Oceans of Energy's technology to standard formats of 150 MW enabling to build Gigawatt scale farms. These building blocks are to become a new standard in offshore energy farms. Placing solar farms within offshore wind farms makes better use of the sea space, increases energy output, provides more continuous power over the seasons, and will drive down costs for green electricity production and the energy system.



BAMBOO Project Partners



Oceans of Energy



SolarCleano



solarge
Endless Energy

aquatera



sirris

aquatera
Atlántico

Fraunhofer
CSP

MARIN

WaveC
Offshore Renewables

European
MARINE BOARD
Advancing Seas & Ocean Science

VATTENFALL

Our team, a blend of expert companies and research organisations, is dedicated to ensuring the project's success. We're making strides in reducing emissions and positively impacting the marine ecosystem.

Join us as we lead Europe towards a greener, more sustainable energy future where innovation meets environmental responsibility.

 bamboo

