



Venturenomix



Strategy and Funding for
Impact Ventures

Horizon Europe Collaborative R&D Grant
Funded Project

Case study // Renewable Energy

“Overall, the project addresses the criterion very well, in particular:

- Open Science aspects are sufficiently defined
- Approach to gender dimension in research is well defined
- Interdisciplinary aspects are well considered
- Methodology is sound
- Proposal clearly goes beyond current state-of-the-art
- Objectives are clear and pertinent

Project is recommended for funding.”

Assessor Comments // Horizon Europe

UN Sustainable Development Goals #



Project Abstract

The overall objective for the project is to achieve a successful demonstration of the novel designs and materials for an ocean thermal energy conversion (OTEC) platform capable of converting solar heat energy stored in the oceans surrounding the Overseas Countries and Territories of the EU, Small Islands and Developing States, and the Asian and African continent into reliable, baseload power with an economical cost model. The following objectives have been identified:

- Technical Specification: Design prototype components using circular materials and computational Modelling tools (Predictive Modelling tools developed and/or refined)
- Research Material Properties
- Build and Installation of Demonstrator: Floating Platform & testing in controlled and real-world settings
- Econometric, Environmental and Social Impact Assessments

This project marries both technical advancements in marine engineering and new materials and computational modelling enabling lower CAPEX expenditure for Marine Offshore OTEC. These engineering and materials gains are transferable to other renewable energies and their offshore installations, as well as more generally for marine engineering needs. Social, Environmental and Economic impacts are taken account of in this proposal and are the key mechanism for knowledge creation and dissemination.

Working Together – Partners in the Project

The PLOTEC project brought together OTEC experts (**Global OTEC Resources**, offshore Renewables experts (**WAVEC**), research infrastructure or a real environment marine test site (**PLOCAN**), marine engineers (**GOR, CTECH** and **Plymouth University**), plastics engineers and renewable materials experts (**AGRU**), Academic experts of Engineering, Computing and Mathematics (**Plymouth University**), and Policy and SIDS expert consultancy (**Island Innovation**) supporting the transition to sustainable energy technologies in small islands and developing states (SIDS) and the EU's OCTs (Overseas Countries and Territories).

Successful Outcomes

The PLOTEC project was awarded Horizon Europe funding worth €3.5m to the project partners over a 2-3 year project period. The project involved some UK-based companies, and with the UK in 'transition' at the time of the award, funding through the UK Government Horizon Europe Guarantee fund was accessed to ensure the project was fully funded. The project is live on Cordis where you can follow the progress and get more information – [link](#).