

PRESS RELEASE

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OCEAN-H2. Offshore clean hydrogen production for multiple uses

The Ocean-H2 (Offshore Clean Hydrogen Production for Multi-use Purposes) project was launched in September. This SBEP (Sustainable Blue Economy Partnership) project aims to assess the long-term feasibility of large-scale sustainable green hydrogen production using offshore renewable energy (ORE). The project aims to contribute to the decarbonization of various sectors and the achievement of a clean energy future.

Coordinated by the Department of Electrical Engineering at the University of Malta, the project is supported by the Department of Social Sciences at the University of Naples Federico II, the Research Institutes of Sweden (RISE), Fraunhofer ISIT (Germany), and CNRS FEMTO-ST (France).

The project's primary objective is to identify the most effective technical solution for the large-scale production of green hydrogen in the European Union's seas. To this end, the project will analyze three marine basins - the Mediterranean, North Sea, and Baltic Sea - as case studies for the implementation of offshore microgrids powered by medium-voltage direct current (MVDC), evaluating configurations, performance, and scalability. The project's second objective is the optimal integration of offshore plants with existing EU electricity grids. The partners intend to develop connection models that take into account the specific infrastructure and renewable resources available in each basin, fostering synergy between decentralized generation and continental distribution.

Finally, the project aims to outline realistic cost scenarios, identifying efficiency levers and investment opportunities in the three selected marine contexts, addressing the social dimension and potential conflicts of interest related to system acceptability. The partners are thus committed to exploring socio-technical approaches for dispute management, stakeholder engagement, and participatory consensus-building around the proposed solutions.



**Sustainable Blue
Economy Partnership**



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OCEAN-H2

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