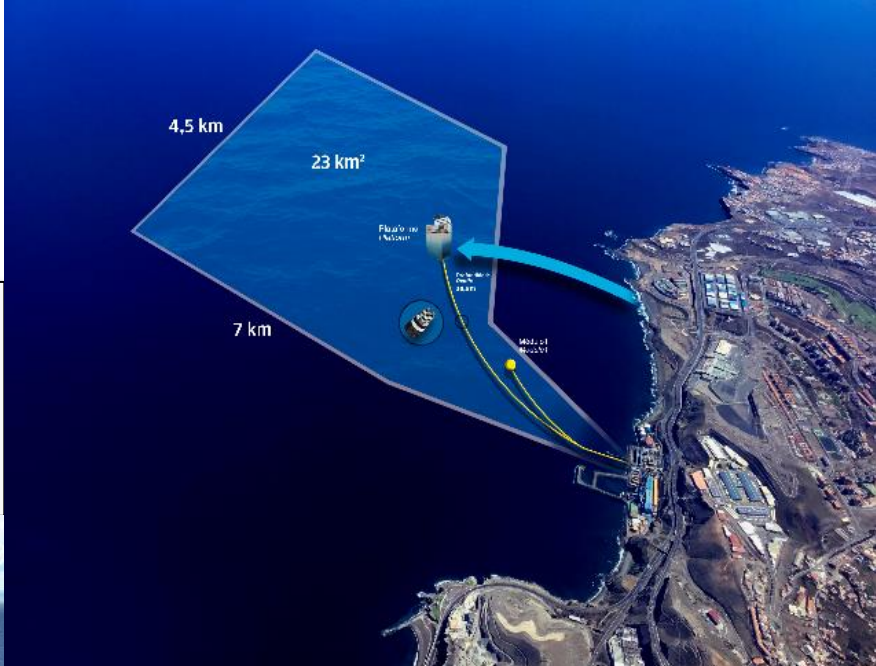




PLOCAN: a Multipurpose Testing Infrastructure for Marine Energies



PLOCAN

Plataforma Oceánica
de Canarias



PLOCAN Marine Test Site



The oceans cover 70% of the planet's surface and must be managed responsibly and sustainably.

PLOCAN has a unique multipurpose technological ecosystem in the marine environment, designed for effective environmental protection.

Ideally located, the PLOCAN test site has optimal environmental conditions for year-round operation.

- Logistics and infrastructure
- Sensing and monitoring
- 23 km² test site
- Wave power density: 300-400 W/m²
- Wave power density: 4-8 Kwh/m
- Multipurpose infrastructure
- Depths between 0 and 800 m
- Continuous environmental monitoring

Technology acceleration
PLOCAN accelerates new technologies to market.

Job creation
The development of new technologies creates new jobs.

Respect for the environment
Operation sensing and monitoring ensures respect for the environment.

Attracting investment
With more than 50 European projects, PLOCAN is a unique space for new business opportunities.



3 Prototipos de:
5MW 13,2kV



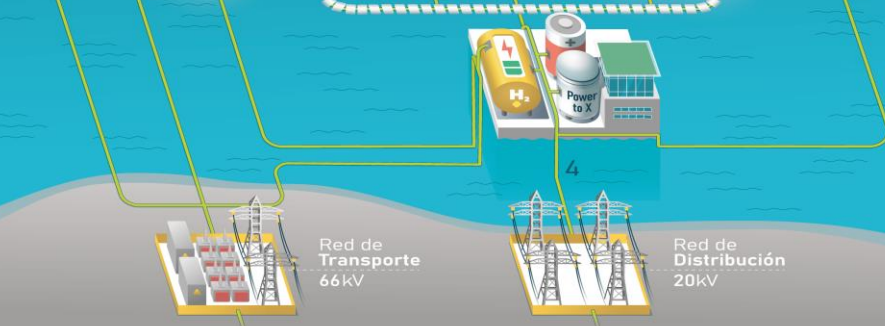
4 Prototipos de:
250kW 400V

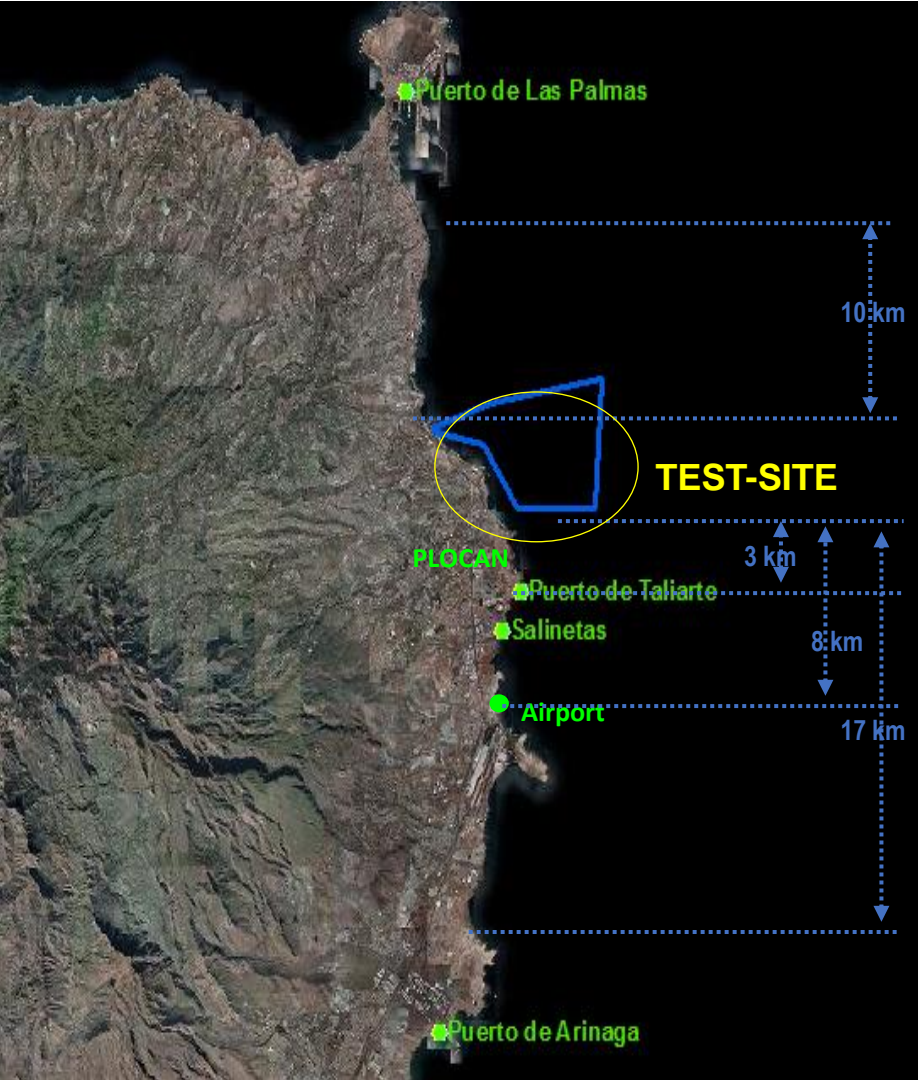


Prototipo de:
250kW 20kV



Prototipo de:
3MW 20kV







Some devices tested at PLOCAN

Testing marine energy: WAVEPISTON



Ocean Oasis to test floating wave-powered desalination plant off Canary Islands

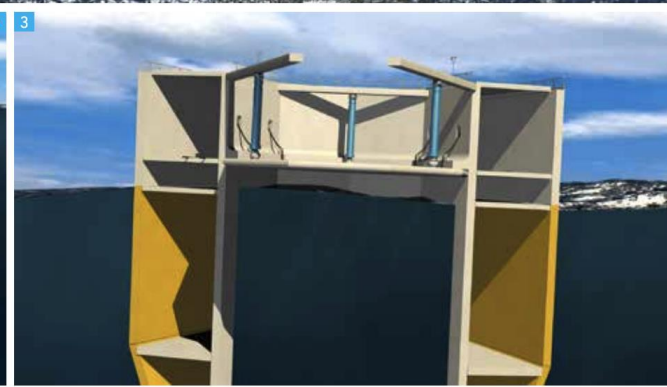
RESEARCH & DEVELOPMENT

February 17, 2022, by Amir Garanovic

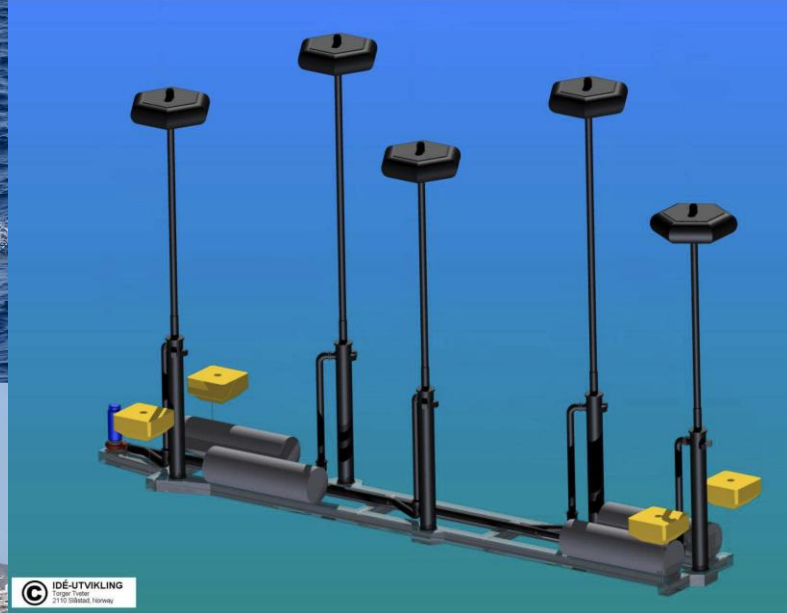
Norwegian company Ocean Oasis has signed an agreement with the Oceanic Platform of the Canary Islands (PLOCAN) to test its wave energy-powered desalination plant.



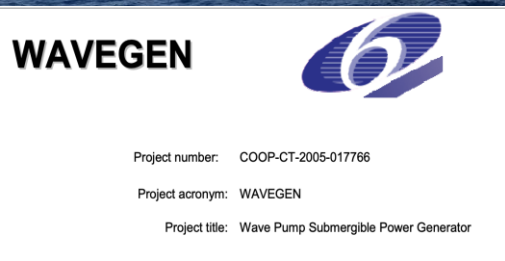
The formalization of Ocean Oasis' planned test activities at PLOCAN (Courtesy of Ocean Oasis)



Prototype: Torger Tveter



© IDÉ-UTVIKLING
Torger Tveter
© 2015 Trondheim, Norway



Project number: COOP-CT-2005-017766

Project acronym: WAVEGEN

Project title: Wave Pump Submersible Power Generator



Multipurpose and Transdisciplinary solutions for islands and open ocean system- Trends

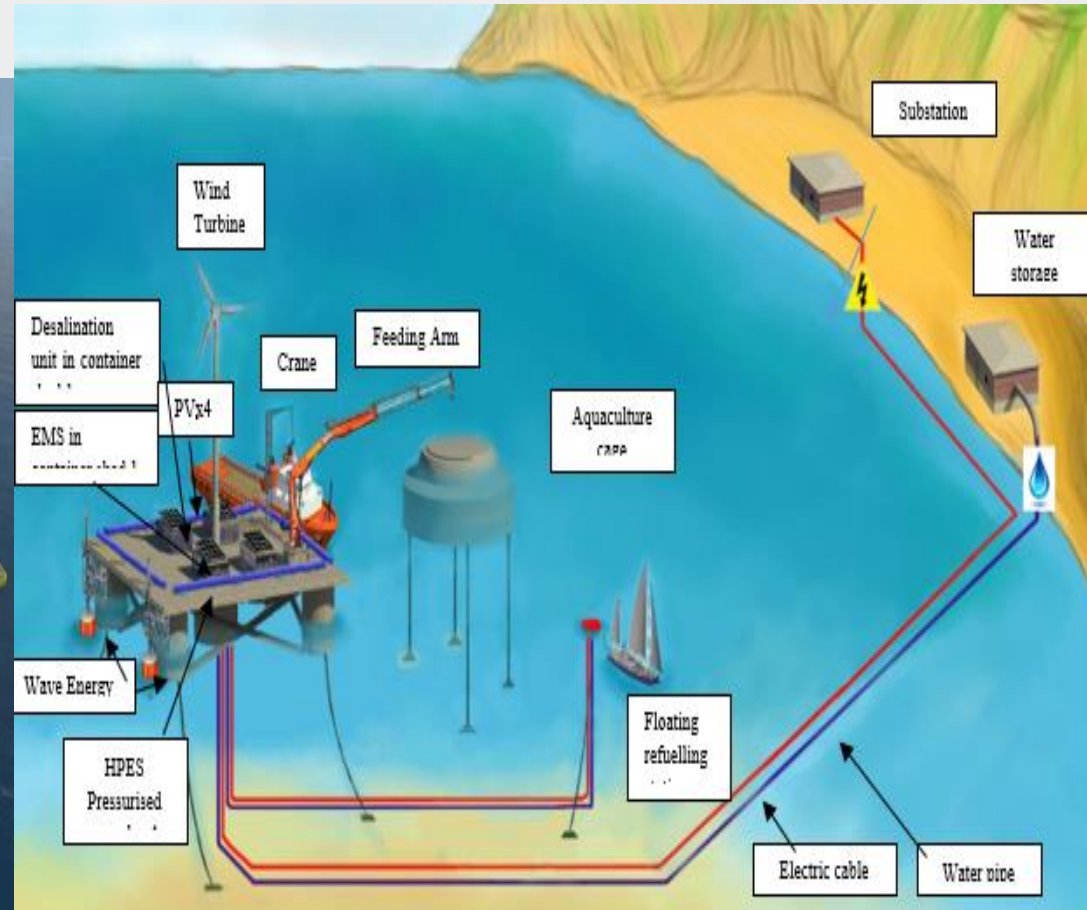


Figure 1.3-1: Image demonstrating MUSICA platform, RES, aquaculture, floating electricity and water recharging station services, and connection to shore.

The FPP Platform

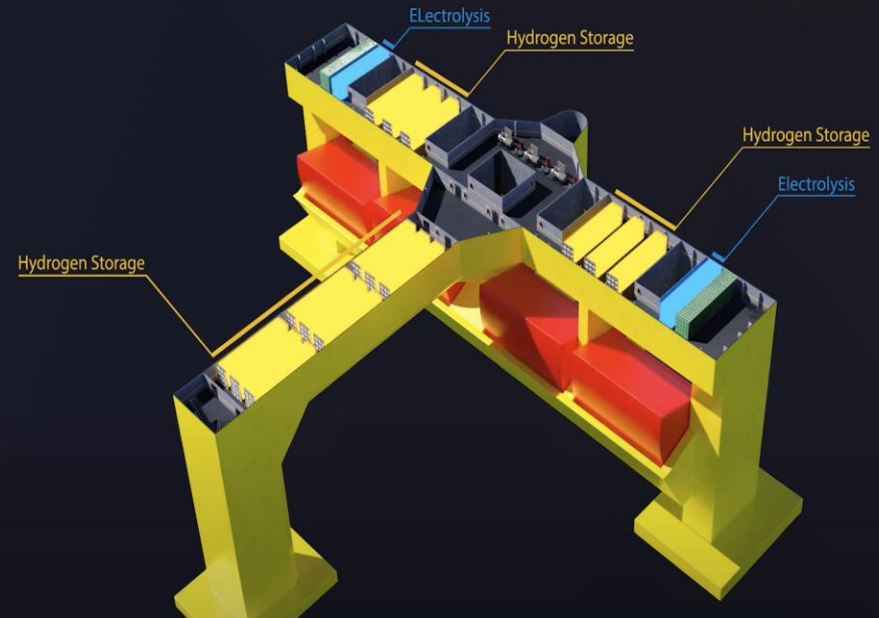
FPP has designed a floating semi-submersible platform that will host a single wind turbine from 4-15 MW and further supports 1-4 MW wave power.

The platform is anchored by using a standard turret mooring technology that has been proven and is still used, by the oil and gas industry. The system used is a disconnectable turret mooring system with slack (catenary) anchor chains.

The combination of the mooring system, the platform design and the high wave energy absorption ensures that the platform vanes 360 degrees in order to face the incoming waves. The mooring turret is the grid connection point [hub] from which the platform can be disconnected and towed away.



Floating Power Plant develops the world's only offshore-proven and grid-connected combined floating wind and wave device.



marinerg-i

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**OFFSHORE RENEWABLE
ENERGY**

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with smart specialisation in key
service areas

Consolidating expertise,
investment and access to
testing infrastructures

E-infrastructure
and data
management

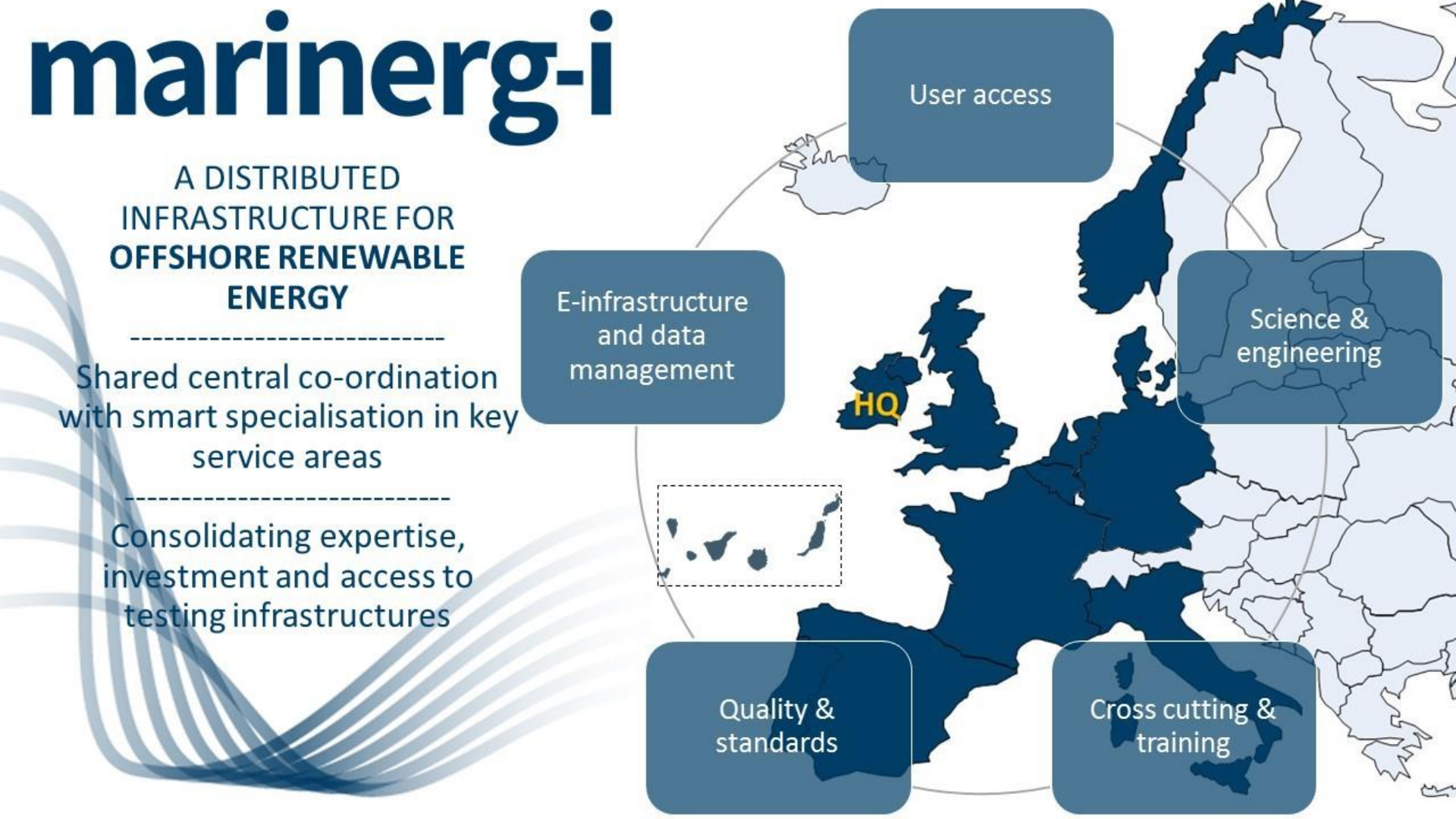
User access

Science &
engineering

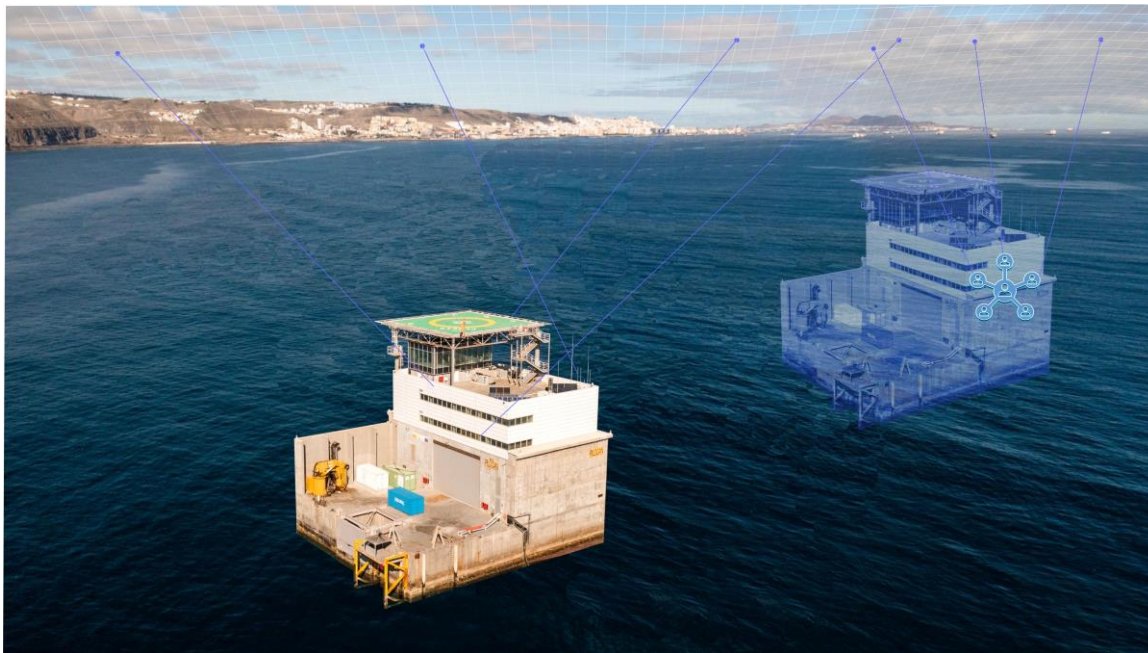
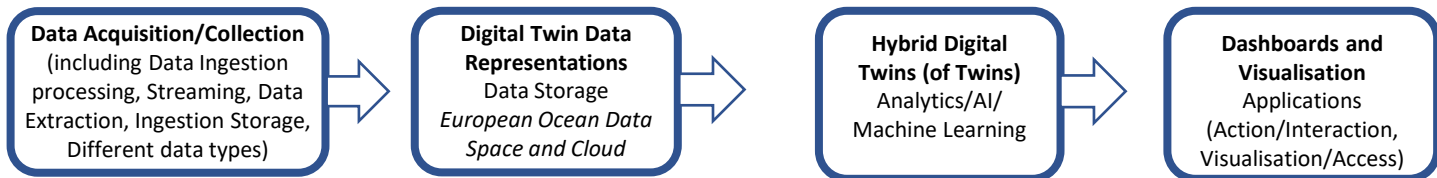
Quality &
standards

Cross cutting &
training

HQ



Towards a Digital Twin of the Ocean, a transparent & accessible ocean



Testing in a virtual environment to reduce LCoE, deliver value over lifecycles

En relación a la **energía undimotriz**, son adecuadas la zona norte de Tenerife, Gran Canaria, Fuerteventura y Lanzarote. Mientras que en La Palma sería óptima la generación en el sureste; en La Gomera en el oeste y en el Hierro en la zona de Valverde. Esta es la energía que presenta un mejor panorama en las islas, según recoge la Estrategia, con un potencial de 300 MW.



Transición Ecológica presenta la hoja de ruta energética para alcanzar la neutralidad climática en 2040

Emalsa plantea el uso de la energía de las olas del mar para desalar agua frente a Piedra Santa

La compañía quiere producir, con diversas iniciativas, 123.000 megavatios/hora al año de energías verdes y renovables



Imagen aérea de las instalaciones de Emalsa en la central de Piedra Santa, en la entrada sur de la capital gran Canaria. / JUAN CARLOS ALONSO

Regulation
Authorization
Consenting



EUROPEAN UNION
European Regional Development Fund

PLOCAN consorcio

PLATAFORMA OCEÁNICA DE CANARIAS



MINISTERIO
DE CIENCIA
E INNOVACIÓN



**Gobierno
de Canarias**



Thank you very much !!

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de Canarias

