GREENHYSLAND

DEPLOYMENT OF A H_2 ECOSYSTEM ON THE ISLAND OF MALLORCA

Project ID:	**101007201**
PRD 2023:	**Panel 6 – H2 valleys**
Call topic:	**FCH-03-2-2020: Decarbonising islands using renewable energies and hydrogen – H2 islands**
Project total costs:	**EUR 23 717 171.22**
Clean H_2 JU max. contribution:	**EUR 9 999 999.50**
Project period:	**1.1.2021–31.12.2025**
Coordinator:	**Enagás SA, Spain**
Beneficiaries:	Enagás Renovable, Acciona Generación Renovable SA, Agência Regional da Energia e Ambiente da Região Autónoma da Madeira, Ajuntament de Lloseta, Asociación Chilena de Hidrogeno, Asociación Española del Hidrógeno, Association marocaine pour l'Hydrogène et le Développement Durable, Autoridad Portuaria de Baleares, Baleària Eurolíneas Marítimas SA, Calvera Maquinaria e Instalaciones SL, Centro Nacional De Experimentación de Tecnologías de Hidrógeno y Pilas de Combustible Consorcio, Commissariat à l'énergie atomique et aux énergies alternatives, Consultoria Tecnica Naval Valenciana SL, Diktyo Aeiforikon Nison Toy Aigaiouae, Empresa Municipal de Transports Urbans de Palma de Mallorca SA, Enercy BV, Energy Co-operatives Ireland Limited, Fédération européenne des agences et des régions pour l'énergie et l'environnement, Fundación para el Desarrollo de las Nuevas Tecnologías del Hidrógeno en Aragón, Gasnam – Asociación Ibérica de Gas Natural y Renovable para la Movilidad, Gemeente Ameland, HyCologne GmbH, HyEnergy Consultancy Limited, HyEnergy TransStore BV, Instituto Balear de la Energía, University of Galway, Redexis Gas Servicios Sl, Redexis Infraestructuras Sl, Redexis SA, Stichting New Energy Coalition, the European Marine Energy Centre Limited, Universidad de La Laguna, Universitat de les Illes Balears, Power to Green Hydrogen Mallorca, Enagás

https://greenhysland.eu/

PROJECT AND OBJECTIVES

Green Hysland is developing all the infrastructure the island of Mallorca (Spain) needs to produce and consume at least 330 t of green hydrogen from newly built photovoltaic plants per year. Green hydrogen will have multiple applications on the island: a fuel supply for a fleet of fuel cell buses and other vehicles, generation of heat and power for commercial and public buildings, a new hydrogen refuelling station and injection into the island's gas pipeline network. The project includes the development of a roadmap to 2050 in Mallorca and activities to replicate the experiments on seven other islands.

NON-QUANTITATIVE OBJECTIVES

- Green Hysland aims to develop public awareness and create a basis for skills development. The project has been presented at almost 120 events.
- Thirteen workshops have been conducted and 15 activities have been organised jointly with other EU projects.

PROGRESS AND MAIN ACHIEVEMENTS

- Green Hysland has delivered and installed a 2.5 MW electrolyser.
- The project has awarded the tender for the Empresa Municipal de Transports (EMT) in Palma H_2 buses.
- It has completed the conceptual design of the six project sites.

FUTURE STEPS AND PLANS

- The H_2 plant will go into operation. The electrolyser was delivered in December 2021 and the plant was expected to be operational in March 2023.
- The tender for H_2 buses was launched in December 2021 and was awarded in March 2022. They were expected to be delivered in the first quarter of 2023 (first bus available and in operation in March).
- During 2023, tenders are expected to be launched for the purchase of the fuel cells for the Puerto Deportivo Naviera Balear, Lloseta and hotel sites in Palma, and for a fleet of 10 vehicles (rental cars and vans). The project is working on defining the technical and administrative specifications of the tender documents.
- The sites are expected to receive the equipment at the end of 2023. Around 2 years of operation of the complete ecosystem is expected within the project period.

QUANTITATIVE TARGETS AND STATUS

Target source	Parameter	Unit	Target	Achieved to date by the project
MAWP addendum (2018–2020)	Commitment of public authorities	M€	–	6.25
Project's own objective	Electrolyser	MW	7.5	2.5

Clean Hydrogen Partnership
Co-funded by the European Union