8<sup>th</sup> Session of the Group of Experts on Gas 25-26 March 2021

# **GREEN HYSLAND**

## Deployment of a H2 Ecosystem on the Island of Mallorca

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This project has received funding from the Fuel Cells and Hydrogen 2 Joint Undertaking (JU) under grant agreement No 101007201. This Joint Undertaking receives support from the European Union's Horizon 2020 Research and Innovation programme, Hydrogen Europe and Hydrogen Europe Research.



Al acuerdo firmado a finales de 2018 por Enagás, Acciona y Cemex, para el desarrollo de una planta de generación de hidrógeno verde, se ha unido también Redexis

El Govern de las Islas Baleares, Francina Armengol y el conceller de Treball, Comerc i Indústria, Iago Negueruela, junto con Enagás, Acciona, Cemex y Redexis presentaron el martes 7 de mayo el proyecto 'Power to Green Hydrogen Mallorca'. La iniciativa cuenta con la implicación directa del Instituto para la Diversificación y el Ahorro Energético (IDAE).



Grupo de asistentes a la presentación pública del proyecto en Mallorca.

This initiative is part of an agreement between the Ministry of Industry, Trade and Tourism and the Balearic Government with Enagás, Acciona, CEMEX and Redexis to **reindustrialise** Lloseta (Mallorca).

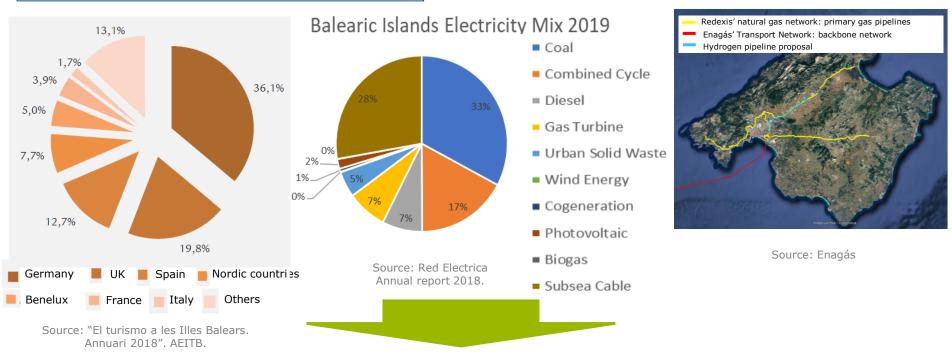
The project includes the development of a **green hydrogen** production plant from renewable photovoltaic energy. Green hydrogen will have **multiple applications** on the island, including the **fuel supply** to a fleet of **fuel cell buses** and **fuel cell** rental **vehicles**, the generation of **heat and power** for commercial and public buildings, the supply of **auxiliary power for ferries** and **port operations** and the creation of a **HRS**.

The project includes **green hydrogen injection** into the island's gas pipeline network, through a **Guarantee of Origin System**, to decarbonise the gas supply.

On 24/05/2019 the Balearic Government approved the declaration of the Power to Green Hydrogen Mallorca Project as **a Strategic Industrial Project.**  POWER TO GREEN HYDROGEN Mallorca (GREEN HYSLAND) - Context

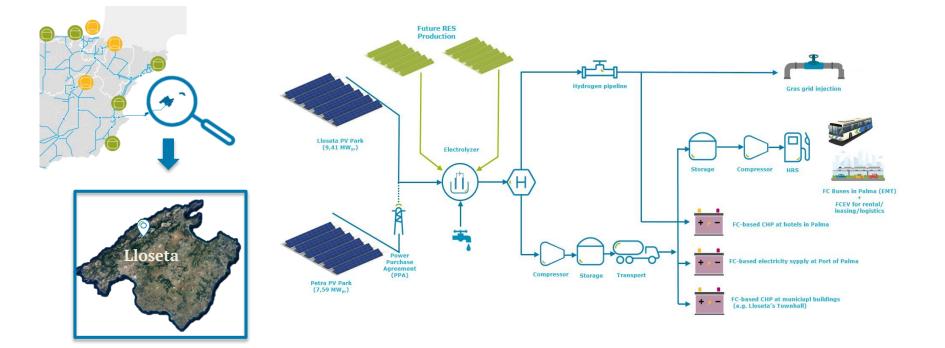
11,947,382 tourists visited Mallorca in 2018

GREEN HYSLAND



Development of a "H2 ecosystem" which can be replicated across other islands and remote territories in UE and beyond

## GREEN HYSLAND POWER TO GREEN HYDROGEN Mallorca (GREEN HYSLAND) - Concept



### GREEN HYSLAND POWER TO GREEN HYDROGEN Mallorca (GREEN HYSLAND) – Sites location



- Site 1: Lloseta Green H2 plant
  - Site 2: Lloseta Municipal building FC
  - Site 3: Cas Tresorer H2/NG mixing station & connection to NG gas grid
  - Site 4: Palma hotel FC
- Si Si
  - Site 5: Palma HRS at EMT bus depot
  - Site 6: Port of Palma FC
- Pipeline Lloseta to Cas Tresorer

GREEN HYSLAND POWER TO GREEN HYDROGEN Mallorca (GREEN HYSLAND) – Key figures



Avoided carbon footprint: more than **21,000 tpy** 



New direct and indirect employment ecosystem associated to hydrogen



Development of a sustainable large-scale island-based H2 hub in Mallorca

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Development a long-term roadmap to lay the path for a local & regional based economy towards 2050



Scalability and Replicability

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Estimated **investment** ≈ 50 M€

### GREEN HYSLAND POWER TO GREEN HYDROGEN Mallorca (GREEN HYSLAND) – Consortium

#### <u>Consortium</u>



#### Supported by:



(H)



#### GOVERN ILLES BALEARS

19 Letters of Support

+

9 Observers

# Thank you mjaen@enagas.es





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