









What could a Green Hydrogen Valley be?

A Hydrogen Valley is a geographical area where there is an original important hydrogen consumption, and green hydrogen is used to replace it in order to decarbonize the activity.

This **initial activity** will allow **economies of scale** (improving the economics behind the project), **attract investments** in all the value chain and favour the **development of new innovative applications**.

Experiences and knowledge gained will foster local growth and replicability.









The Andalusian Green Hydrogen Valley will become real soon



















The Andalusian Green Hydrogen Valley & linked projects at a glance

A Valley focused on the decarbonization of industry and heavy transport



Palos de la Frontera

2G biofuels plant

1 GW of electrolysis capacity to:

Decarbonize industrial activity

Produce:

- E-Ammonia
- E-Methanol

San Roque

1 GW of electrolysis capacity to:

Decarbonize industrial activity

Produce:

• E-Ammonia









The Andalusian Green Hydrogen Valley: A Key project for maritime sector

Agreement with Port of Rotterdam to supply decarbonized fuels for bunkering or for cracking to supply H2 to Northern European customers







Via "Project of Common Interest" label: connection with other European Valleys creating cross-regional projects (helping to develop TEN-E and TEN-T corridors)



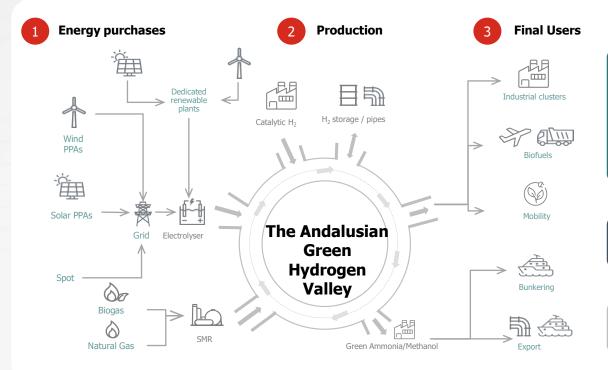






The H2 Ring: Cornerstone in both locations

The H2 Ring makes the H2 production technically and economically feasible, overcoming the limitations of renewal intermittency and hourly balance.





Electrolysers will be supplied with renewable production from:

- Directly connected plants
- The grid (with PPA, RED III fully compliant)
- Flexibility within the H2 Ring will be provided to the power system (through ancillary services)
- 5

Different produced **Green Molecules** will feed **different applications/segments**



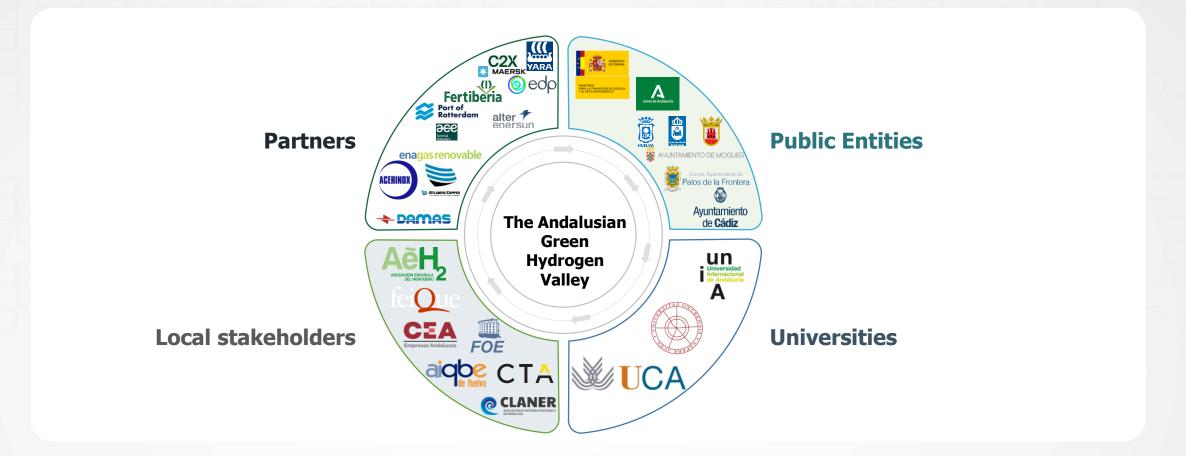






The Andalusian Green Hydrogen Valley Stakeholders: collaboration is crucial

Flagship project to deploy innovation and to attract a comprehensive range of new investors through all the value chain











The Andalusian Green Hydrogen Valley & linked projects at a glance

A Valley focused on the decarbonization of the industry and the heavy transport

Specific actions to retrain & reskill, train and incorporate new employees

Programs Lauched by CEPSA together with the Consejería de Educación of the Junta de Andalucía

To train:

- 1.- FP Impulsa (DUAL, with specific training in renewables and hydrogen and internships at CEPSA's EP)
- 2.- Chairs in Seville, Cadiz, and Huelva (to develop specific skills required by CEPSA Projects)
- 3.- Collaboration agreement with the Universidad Internacional de Andalucía, UNIA (specific program on H2)

To incorporate: Challenging U

Specific actions to disseminate the innovation & knowledge acquired

Specific platforms selected to share information:

- Participation in international, European and local events (EHEC24, COP, WEF, EU Hydrogen Week, etc.)
- Specific publications (Green Skills with ManPower, Energy Insights, etc.)
- Web and social media

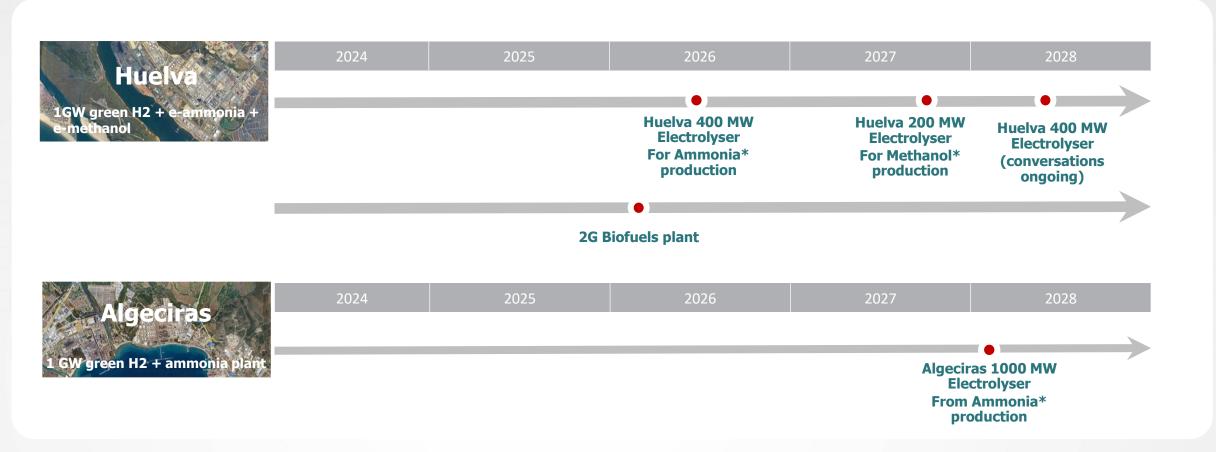








The Andalusian Green Hydrogen Valley timeline



^{*} Main product









The Andalusian Green Hydrogen Valley will become real soon

23rd Feb: Foundation stone of the biggest 2G biofuels plant in Southern Europe to be supplied from the Andalusian Green Hydrogen Valley











Regulatory measures to foster the H2 development and optimize green H2 costs

- Adequate electricity transmission tariffs
- Simultaneous grid access for H2 power demand and linked renewable generation
- Priority dispatch of renewable generation connected to H2 production
- Use of decentralized batteries to supply H2 production









Specific funding solution for Hydrogen Valleys

Subsidies should be enough to cover up to 100% of the funding gap

Received



"Pioneros" call

"Cadena de valor" call

Applications to:



Auction 8th Feb.

Call 9th April.

As PCI Project, applications to:



New application to:



"Clúster/Valles" call

