

CRAVE-H₂

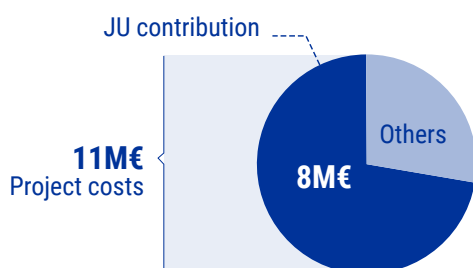
CRETE AEGEAN H₂ VALLEY

CRAVE H₂

Project ID	101112169
PRR 2025	Pillar 6 – H ₂ Valleys
Call Topic	HORIZON-JTI-CLEANH2-2022-06-02
Coordinator Beneficiary	EUNICE, EL
Project Period	01-06-2023 - 31-05-2028
Location	Greece

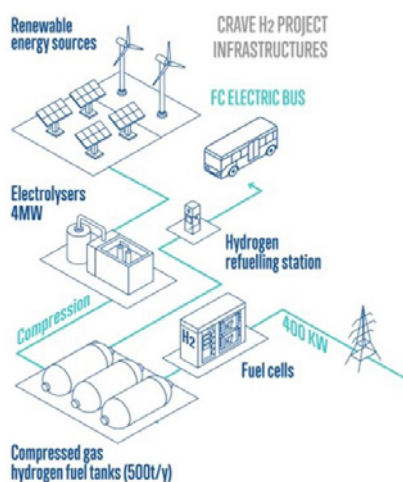
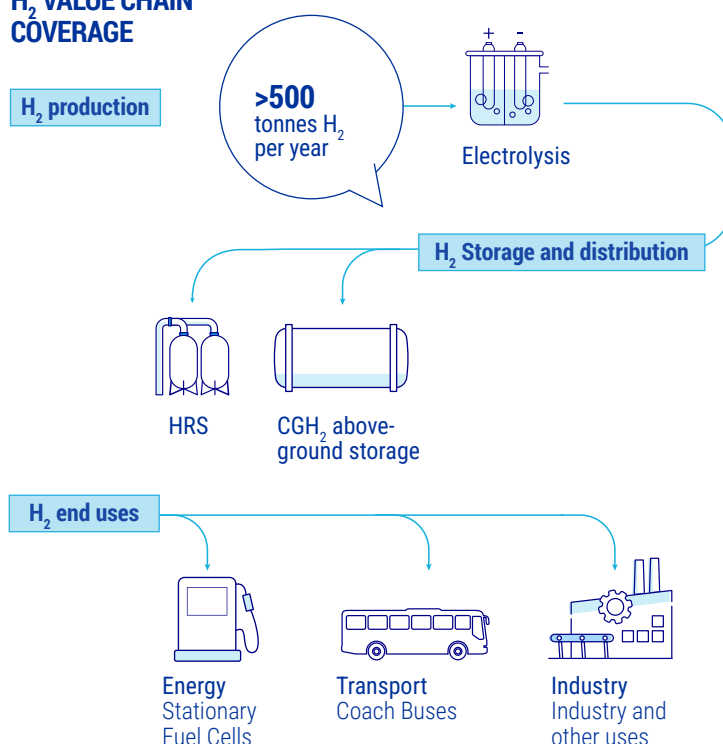


Finances

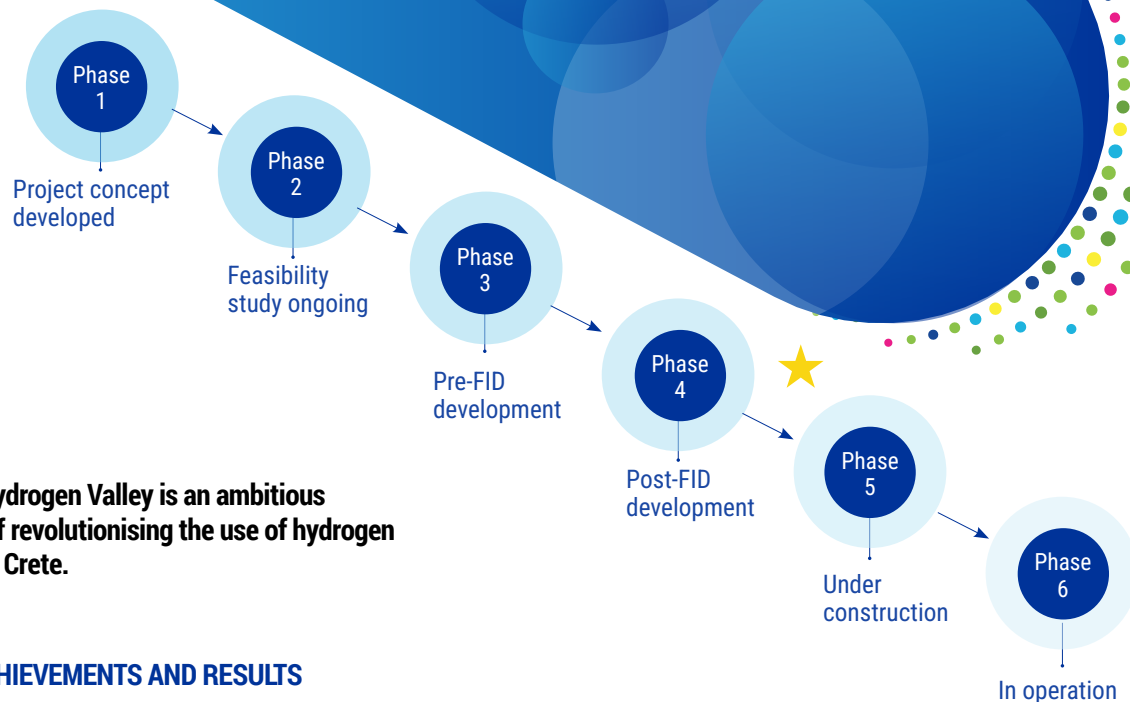


<https://www.crave-h2.eu/>

H₂ VALUE CHAIN COVERAGE



PROJECT TIMELINE



The Cretan-Aegean Hydrogen Valley is an ambitious project with the aim of revolutionising the use of hydrogen on the Greek island of Crete.

PROGRESS, MAIN ACHIEVEMENTS AND RESULTS

H₂ PRODUCTION PLANT

- Safety Plan prepared and submitted.
- Regulatory and licensing frameworks are being addressed.
- Greek authorities were engaged to align hydrogen regulations.

INFRASTRUCTURE PROGRESS

- Preliminary environmental and infrastructure assessments were conducted.
- Preliminary layout and technical specs for all system components were developed.
- Alternative hydrogen distribution and storage methods were assessed.

TECHNOLOGIES DEVELOPMENT

- A 4 MW alkaline water electrolyser was designed.
- a hydrogen-powered fuel cell (FC) facility was designed.
- Technical specifications for a hydrogen coach bus were created.
- A hydrogen utilization plan was developed and is continuously updated.

OTHER

- Built strong relationships with policymakers, local authorities, and energy cooperatives.
- Participation in EU and national hydrogen events.
- Development and maintenance of the Crave-H₂ website and social media.
- Participation in key events like the Conference on Hydrocarbons and the European Hydrogen Valleys Investment Forum 2024, as well as EU and national hydrogen events
- Publishing of 2 peer-reviewed research papers in open-access journals.

FUTURE STEPS AND PLANS

- Finalise site design and permitting for hydrogen production and storage.
- Construct and install the hydrogen production and storage system.
- Complete permitting for the fuel cell plant.
- Construct and install the stationary FC plant.
- Select and commission a hydrogen FC bus supplier/manufacturer.
- Deliver and commission the hydrogen FC bus.
- Analyse alternative uses of hydrogen (e.g., in power plants, industry, maritime).
- Create and distribute promotional materials (posters, infographics, etc.).
- Produce the first project video.
- Participate in conferences, workshops, and seminars.
- Publish additional project results in scientific journals.
- Organize open discussions with local island residents.