HYDEA

Boosting the hydrogen transition in the Atlantic Area ports

DURATION: **3.5 years** | LAUNCH: **2023** | BUDGET: **€3.43M**



CONTEXT

The European Green Deal aims to reduce greenhouse gases emissions by 55% compared to 1990 levels by 2030. Ports can act as drivers of this energy transition as promoters of a more sustainable port activity and maritime transport, and as a place where a very wide range of stakeholders with common interests are interacting. **For all these reasons, the Atlantic ports are positioned as an excellent testing platform that will allow the application of the results in many different sectors, thus strengthening their competitiveness and decarbonation.**

OBJECTIVE

To assess, develop and promote the use of technologies based on green hydrogen from renewable energies in Atlantic Area ports

SCIENTIFIC & TECHNICAL CONTENT

Current situation analysis and opportunities in Atlantic Area

- Mapping of hydrogen initiatives present and planned
- Identification of most promising hydrogen applications and benefits, bottlenecks, and possible measures
- Identification of opportunities in HYDEA ports

Case studies, business models and decision support tool

- Definition of case studies for each HYDEA port, then technical, economical, environmental, and social assessment
- Development of new hydrogen services and port business models
- Development of a decision support tool to facilitate selection of hydrogen technologies
- Reconstruction of offshore wind metrics using data-driven methods

Solutions and pilots of hydrogen-based technologies

- Setting up different demonstration activities in Spain, Portugal, France, and Ireland
- Supporting other agents to test and/or develop their technologies and hydrogen business models

Capitalisation

- Development of a community of the entire hydrogen value chain
- Transfer of knowledge, best practices, and innovations
- Preparation of action plans for HYDEA ports
- Preparation of a roadmap for the implementation of hydrogen in the Atlantic area ports

EXPECTED RESULTS

- **Providing reliable information** on the potential of hydrogen in the European Union and decarbonation of ports
- **Facilitating decision-making** by proposing portfolio of case studies and a tool that collects the knowledge generated throughout the project
- **Guiding the port sector** on the path towards the integration of green hydrogen
- **Developing innovative solutions** adapted to ports and supporting small and medium-sized enterprises to get involved in the hydrogen ecosystem
- **Stimulating joint discussion** on current and future port needs on hydrogen that result in new projects, solutions, and businesses

PARTNERS



Interreg Atlantic Area

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