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CT participates in the development of a zero-emissions tugboat powered by green hydrogen

- **CT, in collaboration with NODOSA shipyards and the University of Vigo, is participating in the design of a harbour tugboat fully propelled by green hydrogen.**
- **The H2TECH4SHIP project is being conducted under the auspices of Navantia's lead project, INNCODIS, as part of PERTE Naval, and has received funding of more than 1.3 million euros for the development of innovative technologies in maritime transport.**

The “H2TECH4SHIP” project, focused on researching the requirements and equipment necessary for hydrogen-driven propulsion, has been selected for funding by PERTE Naval, as part of the framework of NAVANTIA's lead project “INNCODIS: development of an innovative industrial ecosystem for a competitive, diversified, and sustainable naval sector”, with an allocation amounting to over 1.3 million euros.

Shipping is a key sector for global transport, as more than 90% of the world’s trade is carried by sea. There is no single solution to the challenges posed by the decarbonisation of maritime transport, but the role of hydrogen will be essential both alone (as a fuel in itself) and as part of the new generation of synthetic fuels.

This project includes research into all the systems and technological elements necessary for the design of a tugboat type vessel propelled by green hydrogen, a *zero-emissions* ship for which CT will develop the conceptual design, naval architecture calculations, and basic engineering, as well as analysing safety requirements. These are highly demanding tasks with a significant research component, given the absence of applicable regulations, except for guidelines and initial publications from Classification Societies that are beginning to emerge.

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CT is increasingly involved in projects related to the decarbonisation process of maritime transport, with the aim of reducing greenhouse gas emissions. The company, committed to sustainability and environmental protection, is facing new challenges in shipbuilding, both in terms of design and onboard equipment, to ensure that it remains at the forefront of the industry.

About H2TECH4SHIP:

H2TECH4SHIP: Research of requirements and equipment necessary for hydrogen vector propulsion of a tugboat (PNA-020100-2023-8).

Main objective of the project: The H2TECH4SHIP project is aimed at researching the technology related to ship propulsion using hydrogen as a vector. This is intended to increase the knowledge, know-how, and experience of the Spanish naval industry in the construction of H2 ships, through research into all systems assisting a generator unit and the conceptual design of a hydrogen ship. The project includes an analysis of current benchmark technologies for the use of hydrogen in the naval industry.

The project is co-financed with resources from the Ministry of Industry, Commerce and Tourism and the Recovery and Resilience Mechanism (Funded by the European Union – Next Generation EU), as part of the framework of integration and transformation actions of the industrial value chain in the naval industry, within the Strategic Project for Economic Recovery and Transformation for the modernization and diversification of the Spanish naval ecosystem (PERTE NAVAL).

About CT

CT is a leading engineering company throughout the complete product lifecycle. For more than 35 years, our mission has been to provide innovative services and technological solutions that help our clients be more effective and competitive. Today, CT´s success is driven by 2.000+ engineers in seven countries providing end-to-end expert support to leading customers in the aeronautical, space, naval, automotive, railway, energy and industrial plant sectors. www.ctengineeringgroup.com

Financiado por la Unión Europea NextGenerationEU
Plan de Recuperación, Transformación y Resiliencia
GOBIERNO DE ESPAÑA
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