

HOW TO FIND THE OPTIMAL WAY OF TRANSPORT, HANDLE AND CONSUME OF HYDROGEN WHEN IT IS PRODUCED OFFSHORE ?



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THE COMPANY

We are a group that is engaged in the generation, distribution and marketing of energy and services, working to ensure the well-being of people, the progress of companies and society and the sustainability of the planet. Our objective of long-term value creation and sustainable management.

A multinational group operating in more than 20 countries. Our commitment to long-term value creation and sustainable management takes form in our Corporate Responsibility Policy. We currently have Electrical Substations in Asturias, some shared with Hidrocantábrico DE. Our commitment in the region comes since more than 60 years with the Thermal Power Plant in Narcea and our future commitment to invest and reconvert our thermal assets into renewable assets in the region.

Our Strategic Foundations seek to establish a business model focused on creating value. Naturgy is focused on responding to its own industrial model based on: Considering the energy transition as an opportunity. We are interested in growing new Energies Generations in Asturias. Especially Renewable Energies like Solar, Wind, Offshore floating Wind, and Hydrogen production.

Our approach and focus is to boost Offshore renewable generation in the region. We have presented our Manifestation of Interest to Ministry (MITECO) to develop floating offshore wind project and generate green hydrogen for consumption in the industry and decarbonization of the region. So we have two challenges in relation with this approach which have been submitted to the Resolutions Program

THE CHALLENGE :

Naturgy is keen to boost offshore green hydrogen generation. Currently hydrogen is widely used in industrial applications, especially in the chemical and petrochemical industry; In Asturias there is a lot of growth potential given the intensive industry in natural gas consumption and also to promote green mobility. The region can lead innovation in offshore hydrogen production.

Hydrogen is a strong candidate to be one of the most widely used fuels in the future, although for this we still have a lot to innovate. Hydrogen is green to the extent that the energy used in its generation is green. Renewable energies are intermittent and hydrogen plays an important role in storing energy. Of the various energy storage technologies on the horizon, the most promising for its versatility in end applications is hydrogen. Consequently, the development of hydrogen will drive the development of renewables. The hydrogen-renewable energy binomial will be key as both support and reinforce each other. The challenge is to find the optimal way to transport it, handle it and consume it if this hydrogen is produced offshore. Open and quantified ideas: liquefying it, compressing it, consuming it offshore in the marine installation itself..., finding the most suitable technical solution among the different alternatives depending on the distance to the coast.

We need to optimize logistics: the transport, handling and consumption of hydrogen generated offshore. Objective: Reduce the logistical cost of hydrogen transportation with disruptive ideas that optimize its value chain.

THE EXPECTED BENEFITS

Study and Proposals to Optimize the value chain of hydrogen generated offshore: Proposals for transport and consumption in Asturias.

Tracking will be close from Naturgy's Innovation team. If the solutions offered are disruptive and optimize our initial project, we try to implement them in those projects that we lead both in Asturias and in other regions. We are a company that can serve as a catalyst to expand Asturian technology to other geographies.