Crondallenergy

Energy Transition & Abatement

Floating Facilities Subsea & Pipelines Offshore Renewable Energy Technology Development Business Consulting



Hydrogen



What we do

Crondall Energy is actively involved in the development of cleaner energy vectors, including hydrogen. We provide engineering solutions for hydrogen projects. As the interest in offshore hydrogen production and transportation grows, we help clients navigate the challenges associated with hydrogen transportation, both onshore and offshore.

At Crondall Energy we recognise the importance of alternative energy vectors beyond hydrogen. As offshore wind developments move farther from shore and into deeper waters, we are investing in research related to energy transportation and storage.

Our focus extends to vectors such as ammonia and compressed air, which can play a critical role in transporting and storing energy from existing and future offshore renewable energy developments.

We also contribute to industry knowledge through publications and speaker slots at industry conferences and events.

Crondall Energy is at the forefront of advancing hydrogen and other energy vectors, providing expertise and engineering solutions for a sustainable energy future.

The Energy Hub Project: NZTC

Crondall Energy was selected by the UK's Net Zero Technology Centre (NZTC) to undertake a study for a Hydrogen Energy Hub as part of the NZTC's Energy Hub project in Scotland.

The objectives of the study were:

- 1. To develop efficient microgrid solutions for the Hydrogen Energy Hub.
- 2. Explore an alternative perspective by considering the Energy Hub as a microgrid.
- 3. To unlock gains that maximize the overall system efficiency.

Crondall Energy's involvement in this study reflects our commitment to advancing sustainable energy solutions, including hydrogen, in the offshore sector.



Hydrogen and derivative power generation: Subsea 7

Crondall has also worked on small scale hydrogen production and use facilities. One such application was the use of hydrogen as an energy storage medium for an offshore facility.

The system operated such that during periods of excess renewable generation, hydrogen would be generated and stored, for subsequent use during periods of low renewable generation, providing the offshore facility with a net zero power generation system

This study required Crondall to look at the end-toend use of hydrogen and the power system, from generation to storage to use.

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