



PRESS-RELEASE

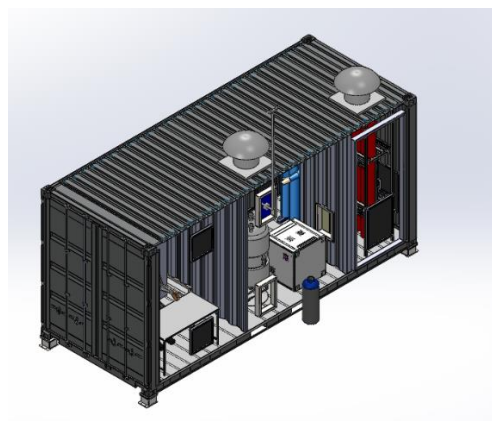
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The HySTrAm project is approaching the demonstration of the overall innovative solution to produce “green ammonia” from hydrogen at lower pressure. The system will test a combination of porous materials and reinforced pressure vessels that will demonstrate lower pressure alternatives for hydrogen storage and safer transport options.

During the last months, the HySTrAm consortium has been working on the optimisation and design of a novel and intensified process for Green Ammonia production. Firstly, to generate the preliminary design of the HySTrAm Ammonia reactor, the consortium has gathered outputs from experimental studies on ammonia synthesis kinetics, ammonia sorption, and process simulation, focusing on fluid dynamics and kinetics perspectives. The developed ammonia synthesis and adsorption system operates under milder conditions compared to existing technologies, which require more extreme pressure and temperature conditions. This process has been successfully integrated into the final prototype by [Hysytech](#), with the support of [CASALE](#).

Furthermore, drawing from the preliminary reactor designed by [Aalborg University](#) and the innovative catalyst and sorbent materials testing results provided by [Johnson Matthey](#) and [Technical University of Eindhoven](#), Hysytech has conceived the final reactor configuration.

At present, Hysytech is coordinating the procurement and preparation of the [ANWIL](#) facilities to ensure the supply of all necessary materials and services, including instrumental air, electricity, internet connection, nitrogen and hydrogen.



*Hydrogen storage and ammonia synthesis containerised solution.
Drawing by Hysytech.*

In the coming months, the ammonia production lab test campaign will be running. At the same time, HySTrAm has started the assembly of the containerised solution for hydrogen storage and ammonia synthesis. This process will enable the consortium to get more accurate information about the performance of the HySTrAm technology under different scenarios. This will contribute significantly to future studies and the development of the HySTrAm technology towards its commercialisation.



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