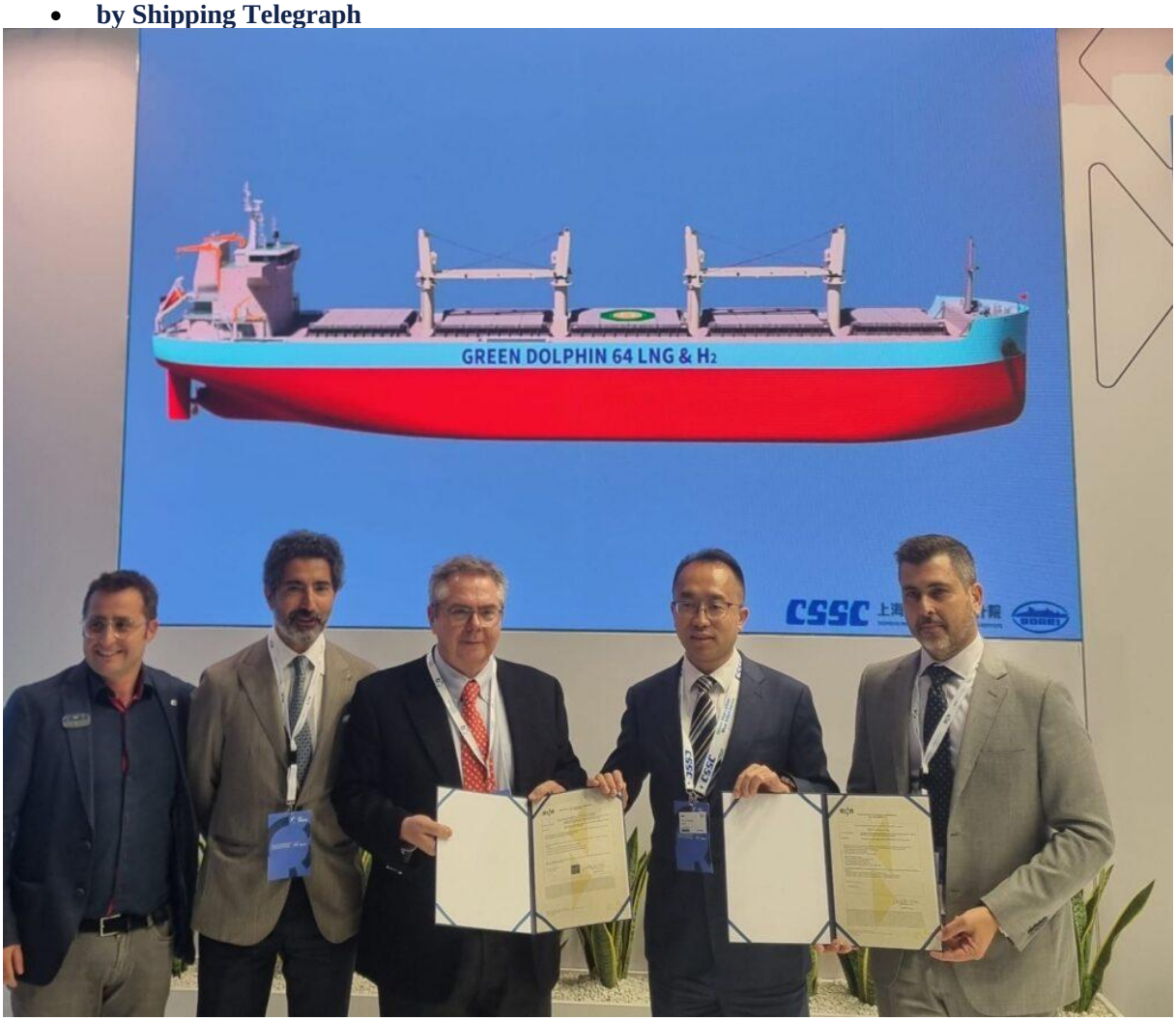
New bulker design eliminates challenges of liquid hydrogen storage, says Almi Marine, RINA

- **10/06/2025**
- **by Shipping Telegraph**



New ultramax bulker design eliminates the challenges of liquid hydrogen storage and supply, says Greek shipowner Almi Marine Management S.A. and RINA. This announcement was made at Nor-Shipping on June 6.

The company has won approval in principle (AiP) from the Genova-based inspection, certification, ship classification and consulting engineering company RINA for a new ultramax bulker design developed by SDARI (Shanghai Merchant

Ship Design & Research Institute) in collaboration with Almi Marine Management S.A.

The ultramax vessel design, based on SDARI's latest-generation Green Dolphin 64 platform, is a dual-fuel LNG/hydrogen-powered Ultramax bulker, featuring hybrid propulsion and advanced energy efficiency technologies.

The AiP acknowledges the design's integration of battery-assisted electric propulsion, wind-assisted systems, and a hydrogen-reforming solution that eliminates the challenges of liquid hydrogen storage and supply, said RINA in its press release.

According to RINA, the designed ultramax vessel has onboard hydrogen production, which provides a path to decarbonization without the technical challenges of supply and storage, thereby improving the ship's carbon intensity indicator and optimizing its pathway to GHG fuel intensity compliance.

This approach facilitates a transition toward net-zero GHG emissions by 2050 through the progressive transformation of LNG into hydrogen onboard.